#### DOCUMENT RESUME

ED 432 904 EF 005 592

AUTHOR Wood, Sue

TITLE Access for Disabled People to School Buildings: Management

and Design Guide. Building Bulletin 91.

INSTITUTION Department for Education and Employment, London (England).

Architects and Building Branch.

ISBN ISBN-0-11-271062-X

PUB DATE 1999-05-00

NOTE 75p.

AVAILABLE FROM Publications Centre, P.O. Box 276, London SW8 5DT, England,

United Kingdom; Tel: 0870-600-5522; Fax: 0870-600-5533

(14.95 British pounds).

PUB TYPE Guides - Non-Classroom (055)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS \*Accessibility (For Disabled); Check Lists; \*Disabilities;

\*Educational Facilities Design; Elementary Secondary

Education; \*Facility Guidelines; Foreign Countries; Public

Schools; \*School Construction; School Safety; School

Security; Standards

IDENTIFIERS \*Access to Facilities; England

#### ABSTRACT

England's Department for Education and Employment provides construction standards with regard to access to school buildings for people with disabilities. This bulletin gives supplementary nonstatutory guidance for school governors and commissioning bodies, seeking to promote a general understanding of the issues and providing guidelines for the briefing process, and providing technical advice for building designers to augment the provisions of the Building Regulations for English schools. It summarizes the provisions within the Disability Discrimination Act 1995, addresses the process of the audit and the purpose and structure of the report created from it, explores meeting Construction Standards criteria and the building management issues involved, and considers issues surrounding the interaction of requirements for safety, security, and accessibility. Appendices illustrate the Accessibility Audit checklist for carrying out an audit survey, cross referenced to design guidance, and references and sources of information. (Contains 25 references.) (GR)

\*\*\*\*\*\*

\* Reproductions supplied by EDRS are the best that can be made

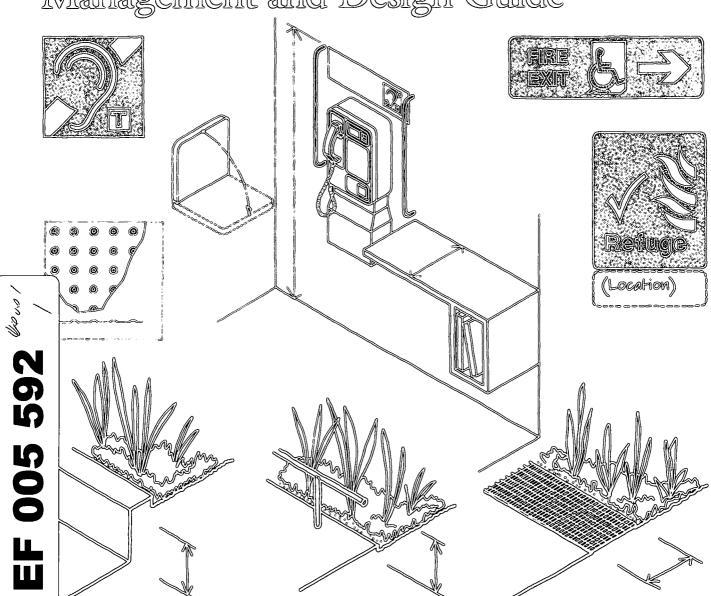
\* from the original document.

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*



## Access for Disabled People to School Buildings

Management and Design Guide



## **Architects & Building Branch**

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent

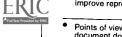
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

J. Birch

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)



Department for Education and Employment



# ACCESS FOR DISABLED PEOPLE TO SCHOOL BUILDINGS

## **Management and Design guide**

Architects and Building Branch Department for Education and Employment



London: The Stationery Office

## **Acknowledgements**

#### DfEE thanks the following

- Pillar Consultancy for the original commissioned report on the future of DN18
- Sue Wood, author of the ensuing guidance reports, technical and governors' guide
- Local authority educationists, architects and access officers who assisted Sue Wood with information and advice
- Respondents to the consultation process on the technical guidance and the DfEE Constructional Standards
- John Penton who pulled these strands together and added much from his own considerable experience in the field to produce this bulletin
- David Rust for the Figures in Section 4 Design Guidance and Premises Management.

Published with the permission of the DfEE on behalf of the Controller of Her Majesty's Stationery Office.

© Crown copyright 1999

© John H Penton 1999

All rights reserved.

Copyright in the typographical arrangement and design is vested in the Crown. Applications for reproduction should be made in writing to the Copyright Unit, Her Majesty's Stationery Office, St Clements House, 2-16 Colegate, Norwich NR3 1BQ

First published 1999

ISBN 0 11 271062 X



## **Contents**

1.	Introduction	4
	Standards, Regulations and Guidance	4
	Built Environment and its Management	4
	Scope and Use of this Building Bulletin	4
	• Definitions	5
2.	Disability Discrimination Act 1995	6
3.	Accessibility Audit	9
4.	Design Guidance and Premises Management	12
	A Approach and Car Parking	12
	B Routes and External Level Change, including Ramps and Steps	14
	C Entrances, including Reception	18
	D Horizontal Movement and Activities	21
	E Vertical Movement and Internal Level Change	24
	F Doors	28
	G Lavatories	31
	H Fixtures, Fittings and Equipment	36
	J Information and Controls including Lighting, Heating, Communications, Safety and Security	39
	K Means of Escape	43
5.	Access, Safety and Security	47
	Procedures in Case of Fire	47
	Fire Alarm Systems	48
	Management	48
6.	Appendix A Information Sources and References	50
7.	Appendix B Accessibility Audit Proformas	52



### Introduction

#### Standards, Regulations and Guidance

- 1.01 The DfEE Constructional Standards refer to the Building Regulations with regard to access to school buildings for people with disabilities.

  Design Note 18 Access for Disabled People to Educational Buildings is superseded by Approved Document Part M of the Building Regulations, subject to overriding variations concerning escape routes, ramps and sanitary fittings, set out in the Constructional Standards. This Building Bulletin gives supplementary non-statutory guidance for
  - school governors and commissioning bodies, seeking to promote a general understanding of the issues and providing guidelines for the briefing process
  - building designers, providing technical advice to augment the provisions of the Building Regulations in the particular instance of schools.
- 1.02 Attitudes towards disability are changing, moving away from the perception of a distinct, homogeneous group for whom separate special provision can be made, towards the notion of environmental accessibility for all. In that context it has also begun to be recognised that this embraces the entire built environment, both existing and yet to be constructed. This in turn means that acceptable, or 'reasonable' standards of provision will be the result not just of how buildings are designed, but also of how they are managed and operated. This applies as much to school buildings as to all other buildings in public use. However, the legal test of whether premises reflect a situation of 'disability discrimination', will be evaluated under the terms of the Disability Discrimination Act 1995 (DDA) in relation to the claims of individual people.
- 1.03 Children in special schools are now most likely to be those with multiple or severe disabilities, while increasing numbers of pupils with a wide range of disabilities are being accommodated in mainstream provision. In that context therefore it is important to remember that as the needs of a disabled individual child change, so there may be a need to carry out further building and / or operational modifications in response.

#### **Built Environment and its Management**

- 1.11 The built environment, however well designed, can not solve all of the problems encountered by disabled people. Managerial or organizational decisions often determine whether the disabled are included or excluded.
- 1.12 When building work to improve access is proposed, it is therefore essential that the evaluation includes current and projected use of space as well as its physical characteristics in order to produce an integrated approach and to involve school governors and managers and, wherever possible, the disabled users in the process. Depending upon the scale of the works, wider involvement of the school and local community may be appropriate.
- 1.13 The aim should be to optimize the balance between changes in function and building work to produce the most economic and efficient use of resources that takes into account the needs of people with disabilities.
- 1.14 Strategic thinking of this kind will benefit the whole school, not just people with disabilities. It also allows the combination of different budget heads to achieve overall improvements.
- 1.15 A strategic overall plan, even if it has to be phased because of lack of funds, will allow the needs of an individual to be viewed in the context of accessibility generally.

#### Scope and Use of the Building Bulletin

- 1.21 It is intended that this Bulletin should assist governors and managers of schools, their architects, and local education authorities (LEAs) to achieve optimum accessibility of their school buildings. It recognizes that how schools are designed, managed and operated will all determine the successful outcome.
- 1.22 Section 2, Disability Discrimination Act 1995, summarises the provisions within the Act with regard to: education, including disabled pupils, special educational needs policy and the new duty to provide information in Annual Reports; schools as places for employment and to which the public are admitted; application of the Act's provisions to existing premises, and their alteration as well as the implications for newbuild



- situations; the concept of 'reasonableness'; and reference to relevant standards and Codes of Practice and the significance of the Accessibility Audit.
- 1.23 Section 3, Accessibility Audit, deals with the process of the audit and the purpose and structure of the Report to which it gives rise. Appendix B illustrates Accessibility Audit proformas for carrying out an Audit survey, cross referenced to design guidance.
- 1.24 The design guidance in Section 4 supplements the provisions of the DfEE Constructional Standards, and applies to new-build construction and also extensions and refurbishment. Sections 4 and 5 are concerned with not only meeting Constructional Standards criteria, but with the building management issues which flow from the provision of accessibility.
- 1.25 Section 5 also includes consideration of the issues surrounding the interaction of requirements for Safety, Security and Accessibility.
- 1.26 Appendix A covers references and sources of information.

#### **Definitions**

- 1.31 In this document the definitions of **disabilities** are those contained within the DDA (see Section 2 which follows).
- 1.32 'Access' is taken to mean access to and within, and egress from school buildings. Whilst considering the route to and through the classroom door it does not go beyond it.
- 1.33 'School Buildings' covers maintained primary and secondary schools, including special schools and SEN units ie Community, Voluntary and Foundation schools.
- 1.34 'Resource Bases' are purpose-built or specially modified accommodation attached to mainstream schools.
- 1.35 'Resourced Mainstream Schools' covers adaptations to allow pupils with a range of disabilities to attend mainstream schools, probably with a permanent core of support staff and equipment. This is in contrast with *ad hoc* adaptations for individual pupils.



### 2. Disability Discrimination Act 1995

- 2.01 The Department's Circular Number 3/97, 
  'What the Disability Discrimination Act 1995 
  means for Schools and LEAs', gives guidance 
  on the implications of the Disability 
  Discrimination Act. The new rights that the 
  DDA gives to disabled people affect governing 
  bodies and LEAs in three main areas:
  - Employing staff. Employers, including governing bodies and LEAs, must not unjustifiably discriminate against current employees or job applicants on the grounds of disability, and may have to make reasonable adjustments to their employment arrangements or premises if these substantially disadvantage a disabled person.
  - Providing non-educational services to the public. Governing bodies and LEAs must not unjustifiably discriminate against disabled people when providing non-educational services, for example, when they let rooms in the school for community use. From October 1999 they will be required to take reasonable steps to change policies, practices or procedures which make it impossible or unreasonably difficult for disabled people to use a service; provide auxiliary aids or services which would enable disabled people to use a service; and overcome physical barriers by providing a service by a reasonable alternative method. From 2004 they will have to take reasonable steps to remove, alter, or provide reasonable means of avoiding physical features that make it impossible or unreasonably difficult for disabled people to use a service.
  - Publishing information about arrangements for disabled pupils. Governing bodies, in their annual reports to parents, must explain their admission arrangements for disabled pupils, how they will help such pupils gain access and what they will do to make sure they are treated fairly.
- 2.02 In the provision of goods, facilities and services, under Part III of the DDA service providers must not discriminate against disabled people by refusing to provide any service which is provided to members of the public, providing a lower standard of service or providing a service in a

- worse manner, or offering a service on less favourable terms. Provision of education is excluded from these new requirements as the Education Act 1996 makes comprehensive educational provision for children with special educational needs, and enables parents of children with special educational needs to play an active role in their children's education.
- 2.03 The provision of non-educational services is covered by the new requirements under Part III of the DDA. The Department's view is that this includes activities such as governing body meetings; services offered to pupils which are not related to their studies, such as skiing holidays; services offered to parents, such as meetings to present the annual report; admission and exclusion hearings where an appeal is by the parents; fund-raising events organised by parent teacher associations such as jumble sales, boot sales or dances; leisure time activities for children or adults without any element of educational development; and the use of school sports facilities by the local community or the hiring of school accommodation to members of the public.
- 2.04 In December 1997 the Government established a Disability Rights Task Force (DRTF), its remit being:

To consider how best to secure comprehensive, enforceable civil rights for disabled people within the context of our wider society, and to make recommendations on the role and functions of a Disability Rights Commission (DRC). The DRTF will take full account of the costs as well as the benefits of any proposals, as far as is quantifiable and practicable, and in particular ensure that its recommendations for a DRC achieve value for money for the taxpayer.

DRTF submitted its recommendations on the establishment of a Disability Rights Commission and a White Paper was published in 1998. If accepted, once the DRC has been established, the National Disability Council will cease to exist. The Task Force's final recommendations will be submitted to the Government in 1999 and are likely to recommend new disability discrimination civil rights legislation to replace the existing DDA.



පි

- 2.05 During the coming years governors, managers and architects will find that they will increasingly need to look at their buildings to ensure that they are made as fully accessible as possible. In that context the Accessibility Audit is a fundamental tool (see Section 3 and Appendix B). To some extent the DfEE 1997 Constructional Standards are outweighed by the requirements of the Disability Discrimination Act, whether or not construction is taking place. Accessibility is therefore an issue relating not only to how buildings are designed and built but also to how they are operated, managed and maintained. In the case of Listed Buildings the publication of 'Easy Access to Historic Properties' by English Heritage is particularly helpful.
- 2.06 It is now more widely recognised that disability is a normal part of life, varying in its degree, diversity and distribution, and that it is likely to affect all of us to a greater or lesser extent at some point in our lives. For some however, their disabilities may be made particularly apparent, their dependency upon others increased and their dignity diminished directly as the result of the inaccessibility of the buildings which they are seeking to use, including schools.
- 2.07 The definitions of people with disabilities under the provisions of the DDA are very broad. A 'handicap' results from the interaction of a person's disability with their environment. When it is appreciated that people with disabilities are defined as including
  - wheelchair users
  - ambulant disabled people
  - elderly people
  - those with poor dexterity or little strength
  - those who lack comprehension
  - those with impaired vision
  - · those with impaired hearing,

and that handicapping conditions of varying degrees of severity will arise for those who are

- of excessively large or small stature
- mothers-to-be in the later stages of pregnancy

- parents and others in charge of small children, particularly those using pushchairs
- temporarily injured
- sick or ill
- emotionally distressed or unstable,

it becomes easier to understand how important it is that the conventional and often stereotypical picture of the population needs to be reassessed.

- 2.08 The provisions of the DDA require that reasonable changes must be made to premises 'if these substantially disadvantage a disabled person compared to a non-disabled person'.
  Examples of changes to physical features that might be required can include
  - widening doorways for wheelchair access
  - changing taps to make them easier to turn
  - altering lighting for people with restricted vision
  - allocating a particular parking space, or parking spaces for disabled persons' cars.

A number of factors influence whether it is reasonable for changes to be made. In particular these include

- how much an alteration will improve the situation for disabled persons
- how easy it is to make the changes
- the cost of the measure, both financially and in terms of the disruption that it will cause
- the building owner's resources
- financial help, or other help that may be available.
- 2.09 The Act also defines disability as a physical or mental impairment which has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities. People who have a disability, and people who have had a disability, but no longer have one, are all covered by the Act. Physical and mental impairments include
  - physical impairments affecting the senses such as sight and hearing
  - mental impairments including learning disabilities and mental illness (if it is



recognised by a respected body of medical opinion).

Examples that are likely to be considered substantial include

- inability to see moving traffic clearly enough to cross a road safely
- inability to turn taps or knobs, and
- inability to remember and relay a simple message correctly.

Long term effects include

- those which have lasted at least 12 months, or
- are likely to last at least 12 months, or
- are likely to last for the rest of the life of the person affected.

They also include those which are likely to recur, for instance, an effect will be considered to be long-term if it is likely both to recur, and to do so at least once beyond the 12 month period following the first occurrence.

- 2.10 Day-to-day activities are normal activities carried out by most people on a regular basis, and must involve one or more of the following broad categories
  - mobility moving from place to place
  - manual dexterity use of the hands and fingers
  - physical co-ordination
  - continence
  - the ability to lift, carry or move objects
  - speech, hearing or eyesight
  - memory, or ability to concentrate, learn or understand
  - being able to recognise physical danger.

2.11 For further advice and guidance on the DDA. reference should be made to:

DfEE Circular number 3/97: 'What the Disability Discrimination Act (DDA) 1995 means for Schools and LEAs'

obtainable free of charge from:

DfEE Publications Centre PO Box 6927 London E3 3NZ

Tel: 0171 510 0150

Fax: 0171 510 0196

Wetherby

LS23 7LN

2.12 Also of particular help, setting out general information on disability issues is

'A Practical Guide for Disabled People - Where to Find Information, Services and Equipment' available (also in Braille and audio-cassette) from Department of Health PO Box 410



## 3. Accessibility Audit

- 3.01 An Accessibility Audit is not simply about getting wheelchairs in and out of an existing building. For an Accessibility Audit to be effective it should embrace the needs of people with the whole spectrum of characteristics set out above. The Audit will involve a detailed appraisal of the building and its immediate surroundings and will be prepared in consultation with governors, managers and staff. It may well also involve parents and children.
- 3.02 Pro-forma documents for carrying out an Accessibility Audit are illustrated at Appendix B. The documents are arranged in a sequence of 15 sheets covering the following:

ref. title sheet no.			
A	Approach and car parking	01	
·B	Routes and external level change,		
	including ramps and steps	02	
C	Entrances, including reception	03/04	
D	Horizontal movement and activiti	es 05/06	
E	Vertical movement and internal		
	level change	07/08/09	
F	Doors	10	
G	Lavatories	11/12	
Н	Fixtures and fittings	13	
J	Information and controls	14	
K	Means of escape	15	
S	Supplementary	S/-	

3.03 With the Accessibility Audit Report as the base document, building management strategies to achieve and sustain accessibility can be developed. Optimally these can be related to five/seven year repair and maintenance cycles with prioritised items of expenditure allocated to successive years. It is helpful too if the Accessibility Audit Report is supported by plans, diagrams and photographs of the existing situation as well as proposals for future

implementation. It may well be that conflicts will arise between issues of security, safety and accessibility. The Accessibility Audit Report should therefore be discussed with insurers and should stand alongside the school fire safety and maintenance manuals.

- 3.04 The objectives in preparing the Accessibility Report should include
  - understanding how the building(s) and spaces between and around can best function, having in mind the needs of people with disabilities
  - · agreeing operational access policies for them
  - establishing the priorities, procedures and programme for carrying out the works required
  - identifying the availability of resources including finance
  - developing procedures for maintaining accessibility, safety and security, including during periods of construction, whether or not Construction, Design and Management (CDM) Regulations apply
  - developing procedures for subsequently maintaining the highest possible levels of accessibility upon completion of the works.

#### 3.05 Accessibility Audit Report Format

A suggested format for an Accessibility Audit Report is set out as follows:

#### Section 1 Introduction

General description of the building and its arrangements, including a summary of any perceived problems and issues relating to accessibility for people with disabilities as defined by the DDA.

#### Section 2 Schedule

A schedule of items extracted from the survey proformas listing and illustrating all points needing attention and indicating the possible action required together with its indicative cost



1. 99

and relative priority, following the sequence of the survey. As an example:

Premises: XXXXXXX XXX School

Item

#### A.Approach

#### A/1

There is no designated disabled parking space in front of the school

#### Action

Mark out two designated spaces as near to entrance door as possible + provide signs

#### Cost

£115 +£40

#### **Priority**

Next financial year

Section 3 Photographs, diagrams and plans (reduced)

Section 4 Conclusions and recommendations

Section 5 Access Audit pro-formas.

- 3.06 In arriving at the conclusions and recommendations it should be possible to place the proposals for action in the context of
  - day to day operating procedures
  - repair and maintenance programmes
  - minor works
  - adaptation and improvement works
  - major works and whole building improvements.

Categories of prioritisation could be

- now
   regarded as urgently needed, often to
   provide safe access as much as to achieve
   access itself
- routine maintenance

falling within routine procedures for maintenance and repair and perhaps requiring instruction and monitoring of suppliers and contractors (eg BT, towel suppliers etc), and possibly staff next financial year.
 items to be included in the works
 programme of the first financial year

available within the five/seven year cycle

part of refurbishment
 seen as needing to be included within proposals for the general refurbishment of the building.

If fund-raising is necessary it may be helpful to group items together to show alternative proposals, offering a range of budget targets.

3.07 English Heritage's publication 'Easy Access to Historic Properties' quotes Planning Policy Guidance Note 15: Planning and the Historic Environment. Much of the advice is applicable more widely than just historic and listed buildings, and sets out a model approach to adapting all or any buildings for access for disabled people:

It is important in principle that disabled people should have dignified, easy access to and within buildings. If it is treated as part of an integrated review of access requirements for all users or visitors, and a flexible and pragmatic approach is taken, it should normally be possible to plan suitable access without compromising a building's special interest. Alternative routes or reorganising the use of spaces may achieve the desired result without the need for damaging alterations.

Taking the necessary steps towards satisfying these aims should result in the preparation of an Accessibility Plan.

The key issues to be addressed within the plan will be the location and mode of entry to the building, circulation within it, and escape from it.

Other important issues include:

facility provision (lavatories, etc), signage, lighting, and awareness training for staff.

To these should be added: safety, security and communications which will inevitably include establishing evacuation procedures for means of escape.



- 3.08 The development of flexible and pragmatic Accessibility Plans is advocated and it is proposed that they should be based on a comprehensive assessment. The assessment should
  - identify the existing physical and communication barriers to access (Accessibility Audit)
  - examine the access needs of users (Accessibility Audit)
  - assess the impact of these on features of historic, architectural or archaeological interest, and / or their setting
  - devise solutions which reconcile access and conservation needs (Accessibility Plan).
- 3.09 The guidance proposes that in devising an Accessibility Plan, the key conservation principle should be minimum intervention in the fabric:
  - Measures which avoid or minimise the need for alteration should be considered first.
  - Alterations which adversely affect a property's special character should be avoided.
  - Alterations should form part of a long term strategy for use.
  - Alterations should be reversible wherever possible.

Reversibility should not be used to justify solutions of an insensitive or inappropriately ephemeral nature. In some cases, permanent, high quality intervention in a building's fabric may offer a more satisfactory solution in terms of preserving its special architectural interest, especially where overall architectural coherence is a more important criterion than the sensitivity of the building fabric. Under certain circumstances the use of a separate form or structure detached from the building and designed in a different idiom may also be appropriate.



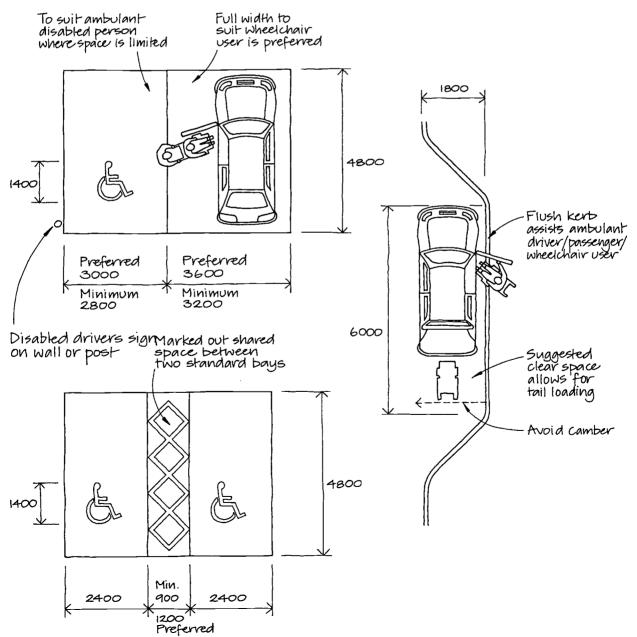
## 4. Design Guidance, and Premises Management

## A Approach and car parking

4.01 Approach routes to a school should be distinctly signposted and there should be clearly indicated and signed car parking provision for disabled drivers. Control gates or barriers should not form an impediment to disabled drivers. The principal entrance should be obvious to those approaching, with one route for all, and both the disabled parking and the setting down point should be as close to it as possible. If possible, shelter should be provided at the setting down point. The approach should be well lit and surfaced with material which does not impede movement, is well maintained and slip-resistant, and helps to inform about direction of movement.

#### 4.02 To achieve these objectives:

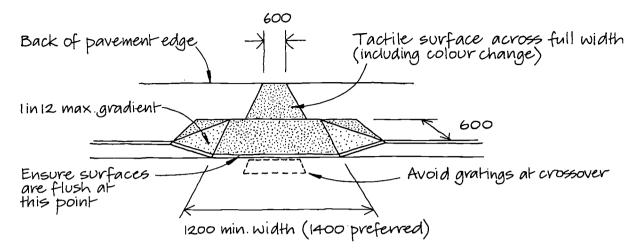
- Signage should use upper and lower case letters and colour / tone contrast.
- Disabled parking bays should be signposted and apparent as the building is approached.
- Parking bays should be wide and long enough to allow car doors, tail-gates and boot lids to be fully opened and transfer to and from a wheelchair effected.



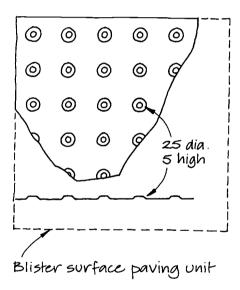


៌ 🖁 র 🗚

- Drop off points for minibuses and coaches should be considered.
- Kerbs should be dropped between setting down points and/or disabled parking bays and the approach to the principal building entrance.



• Where there are existing loose surfaces a smooth 'pathway' of paviors should be inset. This should also be done where disabled drivers alight from their vehicles.



• The approach should be kept clear of ice, snow and fallen leaves.

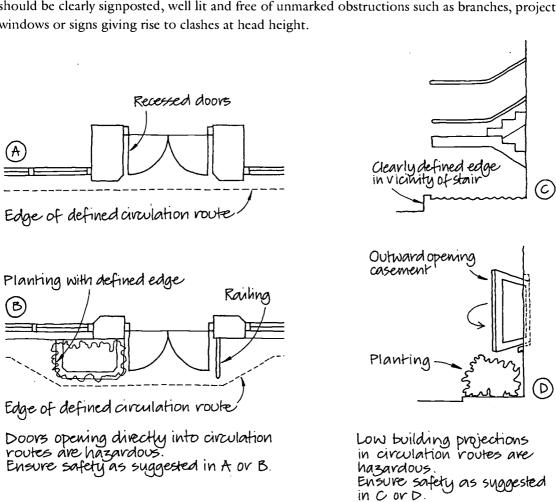
#### Sources

- Building Regulations 1992, Part M Approved Document
- 'Designing for Accessibility' (CAE)
- 'Buildings for all to use' (CIRIA)

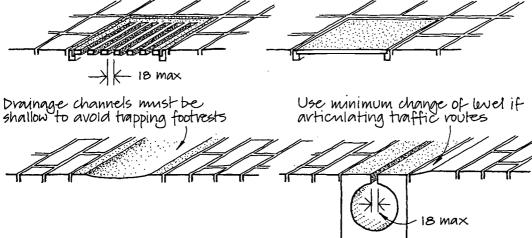


## B Routes and external level change including ramps and steps

4.03 External routes and level changes should seek to minimise the effects of gradient, whilst any ramped surface should be clearly indicated. Surfaces should be slip-resistant and where ramped should have kerbs, and offer the alternative of steps with step nosings clearly marked and with handrails where appropriate. Routes should be clearly signposted, well lit and free of unmarked obstructions such as branches, projecting windows or signs giving rise to clashes at head height.



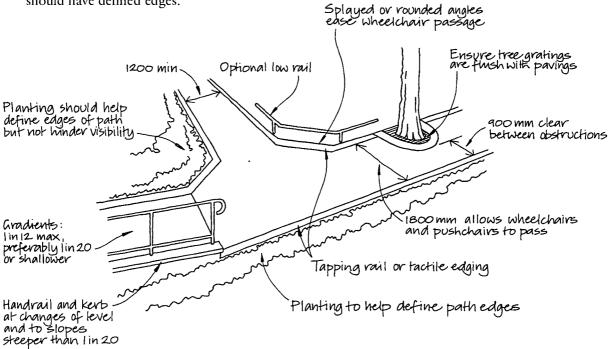
Gratings, covers and grids must be flush with adjacent paving. Grating slots must be at 90° to direction of travel on footpaths.



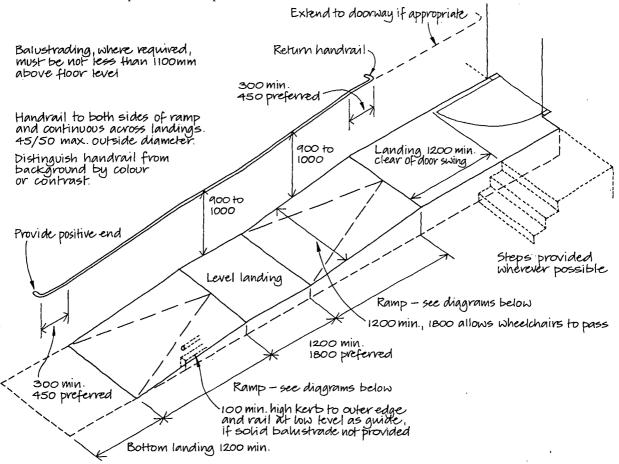


#### 4.04 To achieve these objectives:

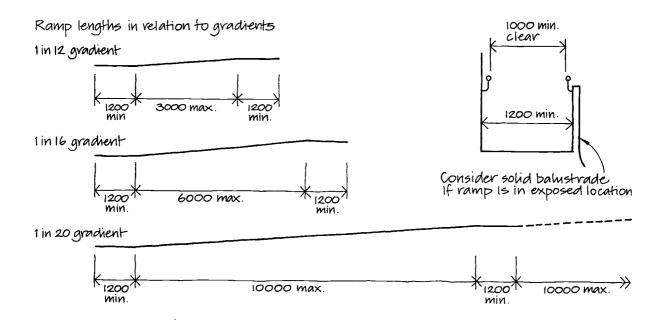
• Paths should preferably be at least 1800mm wide, or 1200mm minimum with passing spaces, and should have defined edges.



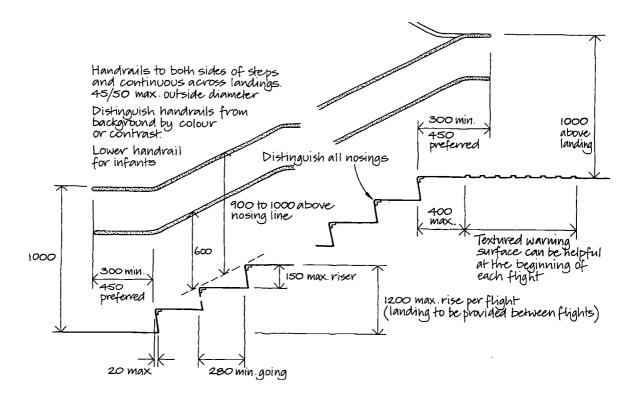
• Ramps should not be steeper than 1:12 pitch with 3m maximum length; ramps at 1:20 pitch, or shallower are preferred, not exceeding 10m long without level intermediate resting places. All ramps should have level platforms at top and bottom.

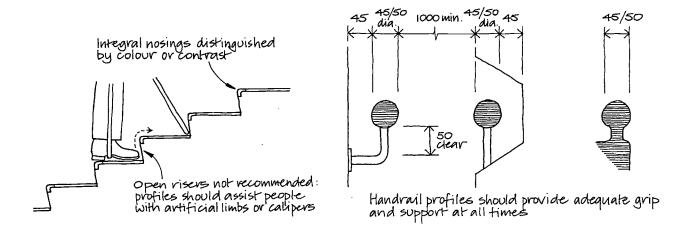




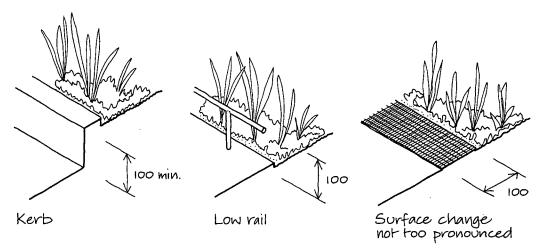


- Ramp surfaces should be slip-resistant and there should be kerbs and handrails provided wherever possible.
- There should preferably be steps as an alternative to any ramp, with consistent treads and risers, and contrasting nosings and handrails which extend at least 300mm beyond the top and bottom steps.





- Routes should be clearly lit, with particular attention paid to ramps and steps. Handrails should contrast with their background.
- Where a permanent ramp cannot be provided, perhaps because the building is listed, a temporary ramp may be an acceptable alternative.
- Very long ramps should be avoided and powered external means of vertical movement considered when height exceeds 1200mm (see also E).
- Planting can provide valuable clues and orientation information, particularly for people with visual disabilities, but will need to be maintained.



Surfaces should be firm, slip resistant in all weathers, well laid and maintained.

Define path edges for tactile and visual information as shown.

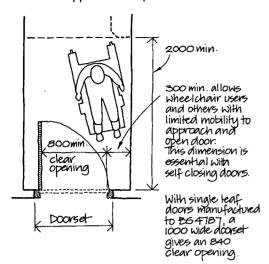
#### Sources

- DfEE Constructional Standards
- Building Regulations 1992, Part M Approved Document
- 'Designing for Accessibility' (CAE)
- 'Buildings for All to Use' (CIRIA)
- 'Easy Access to Historic Properties'. English Heritage

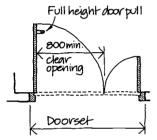


<sup>5</sup> 19

#### Minimum approach requirements



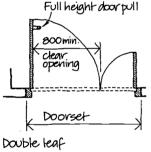
#### Door variations



Full height door pulls and large weatherboards may restrict usefulness of clear opening.

Double leaf

#### Door variations



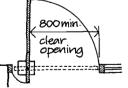
Full height door bulls and large weatherboards may restrict usefulness of clear opening.

With double leaf

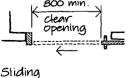
doors a 1800 wide doorset gives an BIO clear opening to each leaf. Less than 1800 will result in unequal leaves if an Boomin clear opening to one leaf is to be maintained (shown).



Pivot



800 min.



Exit Doors:

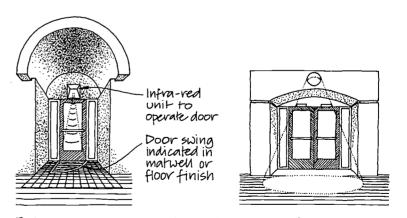
A level threshold is required, and an external ramo if necessary.

#### C **Entrances, including reception**

The principal entrance should be 'for everyone', and should 4.05 be easily distinguished, and welcoming. At the point of entry access should be level. Lobbies should be big enough for manoeuvre by people using pushchairs and wheelchairs, with outer and inner doors openable independently from a wheelchair. Floor surfaces at the point of entry should not impede movement, and glazing to lobbies and doors should avoid the risk of clashes or collisions. Access to the building will need to be reconciled with security requirements. On entering the building the reception point should be obvious and communication should be possible at both standing and seated heights. Staff should be appropriately trained. Information about the layout of the building should be apparent. The reception point is usually an appropriate location for a publicly usable telephone which ought to be suitable for use from a wheelchair and by a person with a hearing disability.

#### 4.06 To achieve these objectives:

- Principal entrances should be accessible, clearly signposted and well lit.
- Substantially glazed entrances and entrance doors should be clearly marked at both standing and seated eye levels to provide for both safety and visibility.
- Door furniture should be easy to grip and operate, and the force required to overcome the power of a doorclosing mechanism should be kept to the minimum compatible with its function, including weather exclusion.

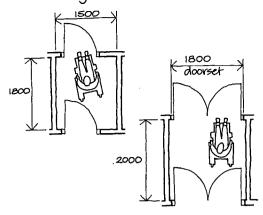


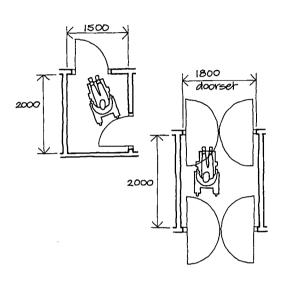
Entrances must be easily distinguishable from the facade, using colour, detail, lighting and texture. They should also relate safety and logically to circulation rootes

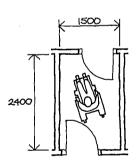
**BEST COPY AVAILABLE** 



Lobby variations







Layout of Lobbies:

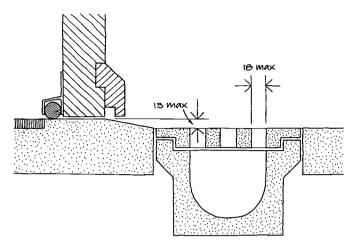
The layout of lobbies will be determined by -

a) door location and the direction

of swing.

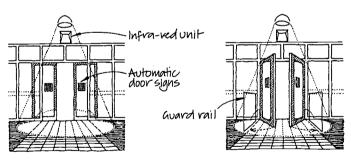
b) the need of wheelchair users and others with limited mobility to pass clear of one door before approaching and opening the second door.

Thresholds should be flush, and, if possible, absolutely level. Mats in matwells and other shoe and wheel cleaning surfaces should also be firmly fixed, flush and level, avoiding tripping hazards.



Level thresholds are preferred but up to 13 max slope is acceptable. Drainage channel is required where no overhead protection, or threshold is vulnerable to wind-blown water

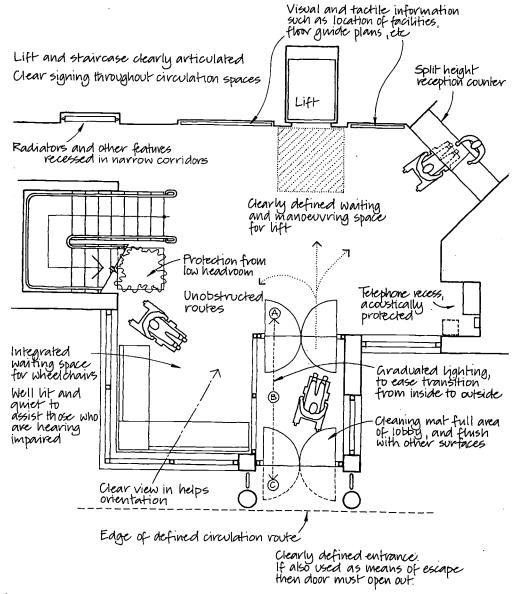
Power-operated automatic doors may be appropriate in some circumstances where doors have heavy traffic and both accessibility and energy conservation are considerations. Automatic doors that swing towards the user can be hazardous and should be appropriately signed. Automatic doors should stand open long enough for a slow moving person to pass through.



The approach to automatic opening doors must be well defined, using tactile and visual information. Hinged doors, if not properly safeguarded, present a hazard to people approaching them.

Lobbies should have dimensions which allow wheelchair users to move clear of the first door before opening the second.

- The entrance should offer a transition zone where people with sight disabilities can adjust from a bright exterior to an interior with subdued lighting.
- Any reception point/information hatch should have a lowered section of the counter with a flat surface usable from a wheelchair, should be well lit and provide hearing assistance.



- Waiting areas at reception should have seating and space for wheelchair user.
- Signage should be in upper and lower case with contrasting colour/tone.
- Any public telephone should be usable from a wheelchair with an adjacent shelf for writing on, well lit instructions readable from seated eye level and hearing aid coupling.

#### Sources

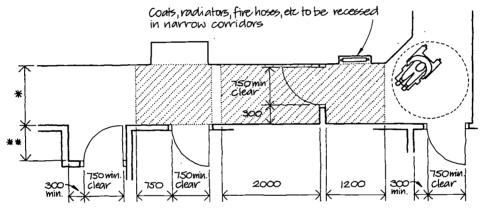
- DfEE Constructional Standards
- Building Regulations 1992, Part M Approved Document
- 'Designing for Accessibility' (CAE)
- 'Buildings for All to Use' (CIRIA)
- 'Easy Access to Historic Properties', English Heritage



## D Horizontal movement and activities (see also section F: Doors)

- 4.07 Movement at each level should be unimpeded and unobstructed. Corridors and activity spaces should permit independent wheelchair manoeuvre and movement by people with visual disabilities. The use of colour, texture, lighting and signage can all contribute to the clarity with which the building can be comprehended, and its component parts identified. Lighting should avoid glare and silhouetting. Teaching and training areas should be equipped to provide hearing assistance.
- 4.08 To achieve these objectives:
  - Ideally 1800mm minimum should be allowed for wheelchairs to pass each other.
    - \* For corridors greater than 1200 wide 900 wide doorsets can be used For corridors less than 1200 wide 1000 wide doorsets should be used

Splayed or rounded corners ease contidor circulation. Allow space for wheelchair turning circle with 750-850 madius



\*\* Recess not less than width of door leaf:
Hazardous if door opens into confined circulation voute

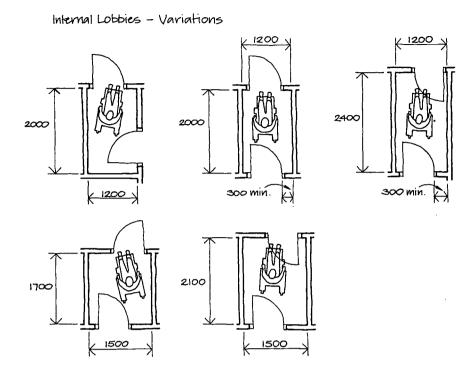
Dimensions and shaded areas provide the minimum space required for users of standard wheelchairs to approach and turn through doorways

- Minimum corridor width should be 1200mm, but if narrower passages cannot be avoided doors into spaces off should have at least 1000mm doorsets.
- Turning circles for wheelchair users should be not less than 1500mm.

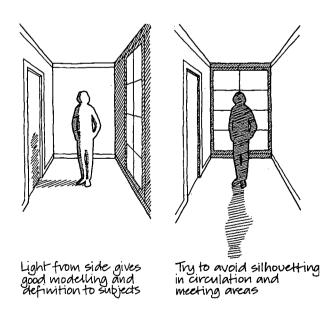
BEST COPY AVAILABLE



• Any lobby should be sized to enable a wheelchair user to move clear of the first door and its swing before negotiating the second.



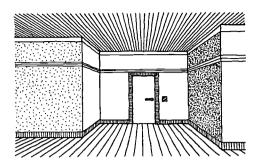
- Where double doors are required in any corridor one leaf should always provide a minimum clear opening of 750mm.
- Natural lighting should avoid glare and silhouetting.



- Artificial lighting should avoid glare.
- Communication spaces should have the capability for the provision of hearing assistance and should have an acoustic environment that reduces sound reverberation and reflection.



• Colour/tone contrasted, upper and lower case signage, and tactile information systems should be provided wherever possible.



Use visual contrast to distinguish floor, wall and ceiling planes, door surrounds, decorative features

- Excessively monochromatic colour schemes should be avoided and floor and wall surfaces should be contrasted.
- Develop, maintain and monitor environmental management systems where appropriate. The role of staff training in ensuring that communications with people with disabilities are effective should be recognised.
- Issues of health & safety, security, and means of escape should all be addressed, and co-ordinated. Items such as fire hosereels and extinguishers should be positioned / recessed to be clearly visible but not obstruct or create hazards for visually disabled people.

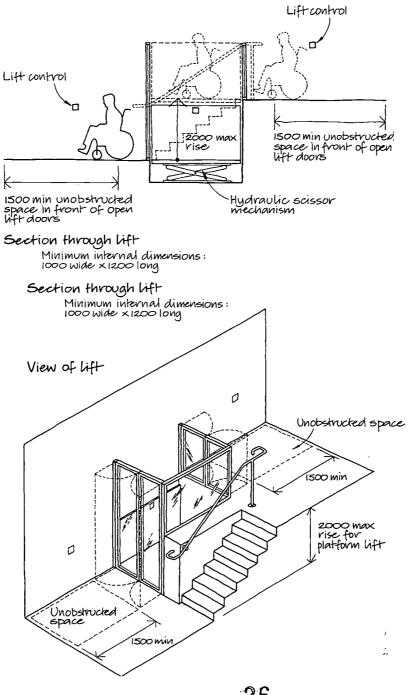
#### Sources

- Designing for Accessibility' (CAE)
- Buildings for All to Use' (CIRIA)
- 'Easy Access to Historic Properties', English Heritage
- What the Disability Discrimination Act (DDA) 1995 means for Schools and LEAs, DfEE circular number 3/97

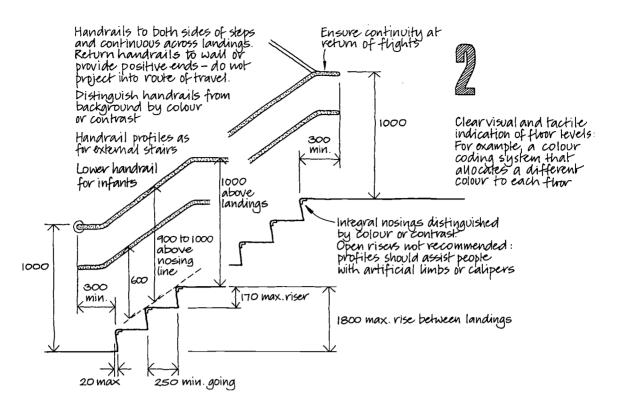


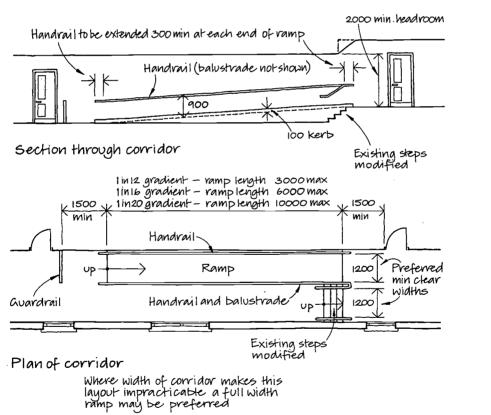
## E Vertical movement and internal level change (see also B - ramps)

4.09 Stairs and ramps are the most common way of achieving change of level within a building but lifts, short-rise platform lifts and stair-lifts may also offer the scope for level change, particularly where it exceeds 1200mm, but is less than a full storey in height. All internal changes of level, including single steps or ramps should be clearly indicated. Where ramps are provided, the pitch or gradient should be acceptable for people with disabilities and steps should be provided as an alternative wherever possible. The pitch of all steps and ramps should be consistent. Where powered means of changing level is provided it should be clearly sign-posted, have operational instructions that are clear for people with all kinds of disabilities, comply with all relevant Codes of Practice and Regulations in relation to safety, and be regularly maintained and its operation monitored.









#### Ramped adaptation to existing corridor steps

#### 4.10 To achieve these objectives:

- Provide colour/tone/texture/contrast/lighting indicators, and handrails, where appropriate, at all changes of level.
- Ensure that all stair nosings are clearly marked in contrast with the treads and risers.



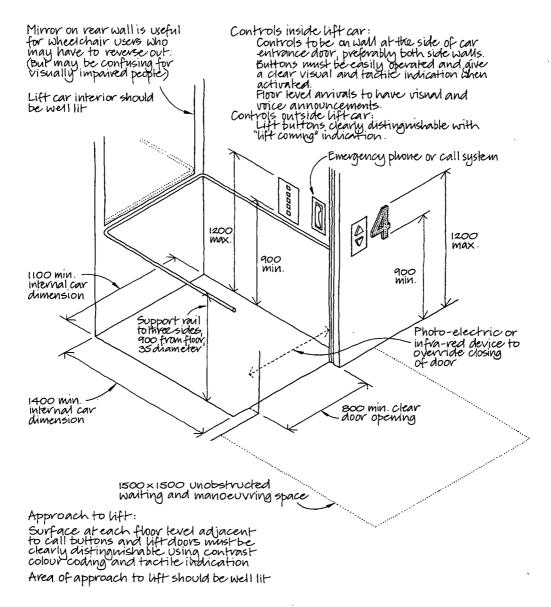
#### • In the case of any passenger lift:

Provide unobstructed space, 1500 x 1500mm minimum in front of the doors at each landing and 1100 x 1400mm within the car (standard 8 person car).

Ensure that controls at the point of call and within the lift car are within reach and are clearly visible from both standing and seated height; not less than 900mm not more than 1200mm above floor.

Lift doors should have a clear opening width of 800mm, and remain open for an adequate time to allow entry; sensor devices should ensure that doors do not close on a slow user or wheelchair.

Audible announcements and visual displays will help people with sensory disabilities.



Raised numbers beside control buttons will help people with sight impairments; braille is read only by a small number of visually disabled people.

Lift cars should preferably have an emergency telephone, which should have an inductive coupler for hearing-aid users.

Any alarm button in a lift car should be fitted with a visual acknowledgement that the alarm bell has sounded for those lift users unable to hear it.



• In the case of any platform lift:

It should be clearly signposted.

It should have key/ security controlled operation.

There should be adjacent stairs.

• Platform stairlifts are not advisable if any other solution is feasible and in most cases will not be appropriate at all.

Ensure that it does not compromise means of escape; width of stair is a major problem.

Parking should be programmed to avoid obstruction.

It should have key/security controlled operation.

• In the case of **all** powered means of level change ensure that its installation, operation, regular inspection and maintenance is carried out correctly and supervised by suitably trained personnel.

#### Sources

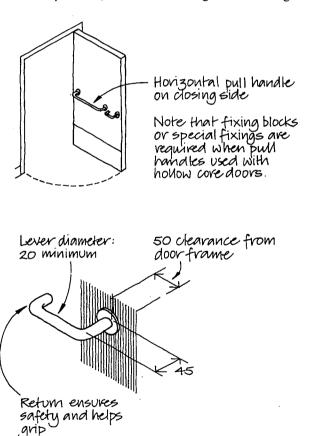
- DfEE Constructional Standards
- Building Regulations 1992, Part M Approved Document
- Designing for Accessibility' (CAE)
- 'Buildings for All to Use' (CIRIA)
- 'Easy Access to Historic Properties', English Heritage
- 'Wheelchair Stairlifts and Platform Lifts', (CAE)



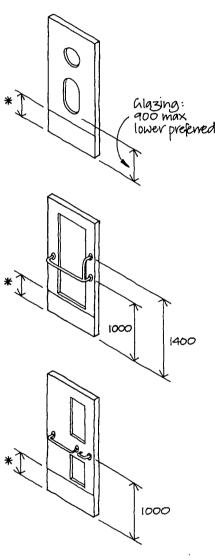


#### F Doors

- 4.11 Doors are intended both to give access to and to enclose spaces. It is all too easy however for badly designed doors to become barriers. It is important therefore that all doors/doorways/access to stairs do not present obstacles to disabled people. Fire doors in particular can be an impediment and the opportunity for them to be held open by alarm-linked devices should be taken whenever possible. All door furniture should be able to be operated with ease, even by people with limited dexterity and power. It is also extremely important that there is optimum visibility for those approaching a door from either side of it.
- 4.12 To achieve these objectives:
  - Doors should be eliminated where possible.
  - Alarm-linked hold-back devices on fire doors should be used wherever possible.
  - Where doors are necessary colour contrast should be used to help distinguish the door frame from its surroundings.
  - Door furniture should be easily gripped and operated, clearly visible, and contrasted against its background.



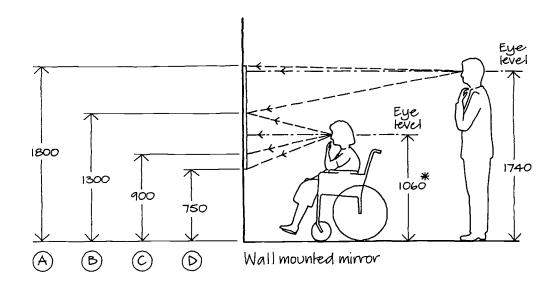
Use colour or contrast to distinguish lever from door

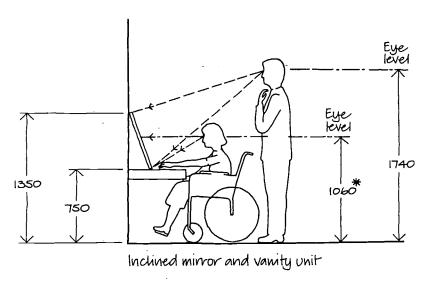


\* Door protection: 400 effective height to protect from wheelchairs



Visibility panels should be provided related to both standing and seated eye levels.

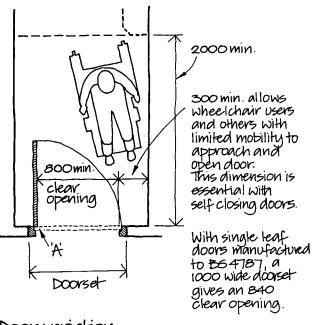




- (A) Mirror head minimum height for ambulant user
- (B) Mirror base maximum heightfor ambulantuser
- (C) Mirkor base maximum height for wheelchair user
- (D) Mirror base preferred height for wheelchair user
- \* 1060 is eye level for a seated small woman or child. A seated mate would have an eye level of 1250



#### Minimum approach requirements

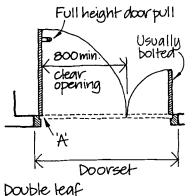


- Where double doors are necessary, one leaf should always provide a minimum clear opening of 750mm even if that requires unequal leaves rather than oblige a wheelchair user to open both parts of the door.
- It is vitally important that there should be sufficient manoeuvre space on the opening side of any door, but especially when a door is self-closing into a corner.

#### Sources

- DfEE Constructional Standards
- Building Regulations 1992, Part M Approved Document
- Designing for Accessibility (CAE)
- 'Buildings for All to Use' (CIRIA)

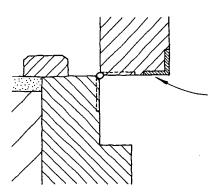
#### Door variation



Full height door pulls and large weatherboards may restrict usefulness of clear opening.

With double leaf doors an 1800 wide doorset gives an 810 clear opening to each leaf.
Less than 1800 will result in unequal leaves if a 760 min clear opening to one leaf is to be maintained (shown)

### Door edge detail at 'A'



Door edge is at maximum risk of damage from wheelchair hub

Protective metal angle let into door edge can be helpful.

## **BEST COPY AVAILABLE**

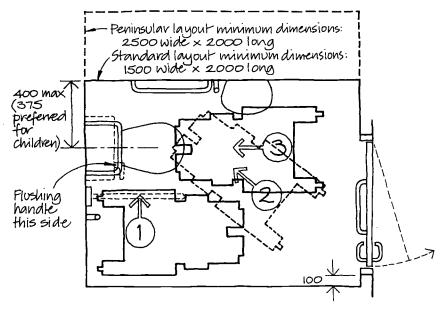


#### **Lavatories** G

## together with showers and changing facilities

- 4.13 Provision of clearly signposted unisex wheelchair accessible WC facilities, designed in accordance with BS5810/979 and Approved Document Part M of the **Building Regulations will** enable a disabled person to have assistance from a helper of different gender, and to wash hands before transferring back to the wheelchair. Such compartments can also double up as a nappychanging points. A 'peninsular' layout permits transfer from either side of the pan and full assistance by a carer but requires significantly more space. Travel distance should be as important a consideration as proportion of population in determining numbers and location of accessible WC compartments.
- 4.14 To achieve these objectives:
  - The details of the design guidance of the layouts should be followed scrupulously.

#### Layout principles: wheelchair 'users



Transfer Options

- 1) Side transfer to wc, with wheelchair backed or driven up to year wall
- (2) Angled transfer using vails and/or grasping wc
- (3) Head on transfer using rails to pivot from wheelchair to we

Standard layout: This allows for use of basin and fittings from seated position on wc Handed layouts recommended where move than one accessible lavatory is available in a building

Peninsular layout:

This allows for approach and transfer from either side, but does not allow use of basin from wc.

Door:

Outward opening door handed to suit wheelchair approach; 100 nominal space at side helpful if door handed as shown. Although door conventionally opens outwards, it may also with advantage open inwards provided that:-

there is a clear minimum space of 700×1100 between door siving and

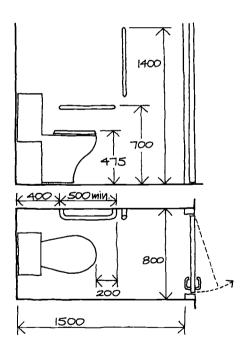
b) the door and frame are detailed to open ontwards in an emergency.



**BEST COPY AVAILABLE** 

- Where more than one unisex WC compartment is provided the opportunity should be taken to hand layouts.
- The colour, or tone, of the background fittings, and any aids such as grab rails, should be contrasted for people with visual disabilities.
- Ceramic tiling and shiny floors should avoid reflections and glare which may confuse people with visual disabilities.
- Slip-resistant flooring, contrasting in colour from wall surfaces, will be important for maintaining safety and hygiene.

#### Layout principles: ambulant disabled



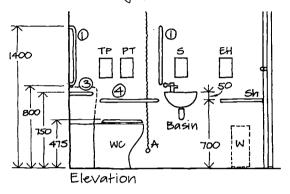
Inward opening doors may restrict access

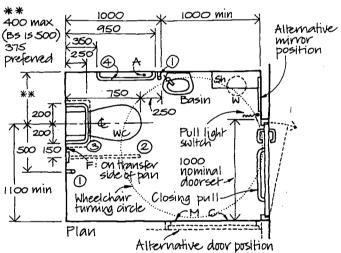
In both standard layout and peninsular layout, the space beside we must be kept clear.

In the permisular layout, the basin is positioned away from wheelchair manoeuvring space.

#### Standard Layout 1500wx2000L minimum

The dimensions relating wo fitting to basin, associated fittings and equipment, and also to wheelchair manoeuvring space are critical for independent use. Overall dimensions shown are minimum and could, with advantage, be increased.





Key to fittings and equipment

Wc: Heavy duty seat, securely fixed

Basin: With single lever operated mixer tap

A: Alarm cord with distinctive pull, extended to low level

C: Coat hook, 1400 above floor

EH: Electric handdrier EW: Emergency wipes\*

F: Flushing tever (on wall/aistern)

M: Mirror 400W x 900H, base 750 from floor

PT: Paper towel dispenser\*

5: Soap dispenser\*
Sh: Low shelf for bags etc

\* for single handed use

TP: Toilet paper dispenser \* W: Sealed container for

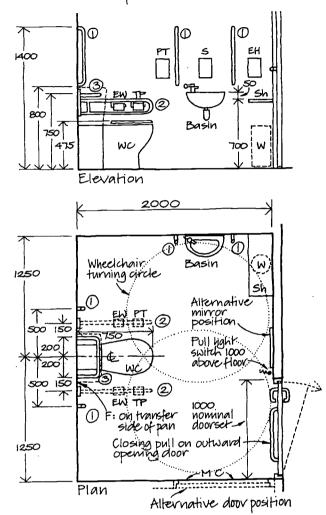
incontinence pads and other disposables



- At least one WC compartment designed for ambulant disabled people should be provided within each range of lavatories included on any storey not accessible to wheelchair users.
- It should be ensured that suppliers and sub-contractors (eg sanitary disposal, and towel suppliers) do not compromise user requirements within wheelchair WC compartments.
- Management procedures should maintain the viability of the facilities.

#### Peninsular Layout 2500W×2000L minimum

Basin should be approachable in a wheelchair with all associated fittings within reach. Dispensers attached to drop down rails facilitate independent use from a seated position on the wc.



(Key continued) Grabrails:

35mm diameter with good grip when wet, well fixed and colour contrasted with walls

- D Fixed vertical rail
- Drop down rail with fittings attached in peninsular layout
- 3 Fixed horizontal vaul behind wc (omit if cistem in place)

33

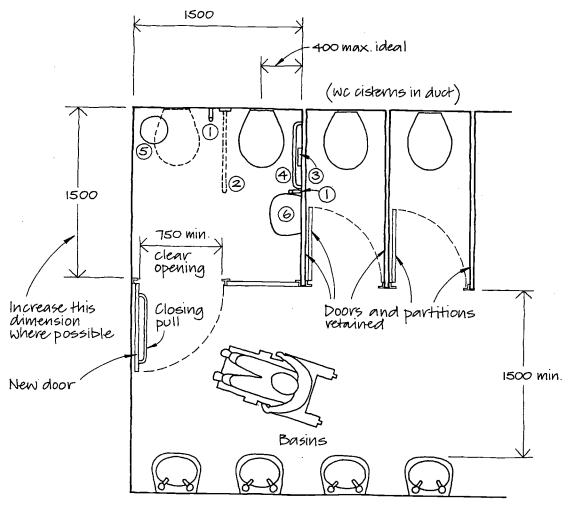
A) Fixed horizontal vail

## BESTCOPYAVAILABLE



- A method should be established through the location of equipment and training of staff for responding to any call for assistance from the user of a wheelchair WC compartment.
- The door of any WC compartment, whether used by ambulant or wheelchair users, should have the capacity to be opened outwards to ensure that entry can be gained even in the event of someone falling and blocking the doorway.

To create the wheelchair compartment, one we pan, a partition and door have been removed; a partition panel (or an existing door fixed shut) and a new wider door have been added.



Minimum adaptation requirements to existing we compartments for wheelchair access

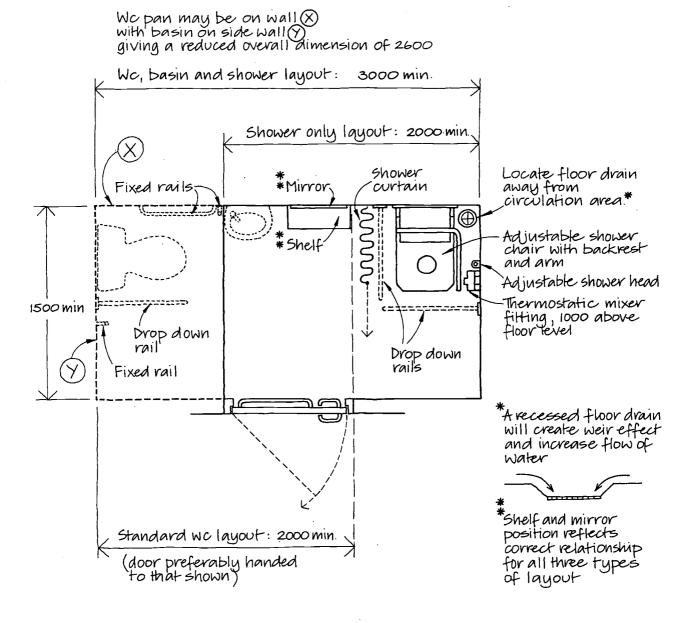
#### Key

Carried March 1988

- ( Fixed vertical support rail
- 2 Drop down support rail
- 3 Toilet paper dispenser (for single handed use)
- 4 Fixed horizontal support rail
- (5) Sealed container for sanitary disposables
- Where practicable, a lavatory basin should be provided within reach of the wc from a seated position



• Any shower should be level, with no lip or rim, incorporate a seat at transfer level, a handset shower with lever operation, and thermostatic control with water temperature outlet not exceeding 43°C. For some pupils with disabilities, different facilities may be necessary - see DfEE Building Bulletin 77 Designing for Pupils with Special Educational Needs, Special Schools.



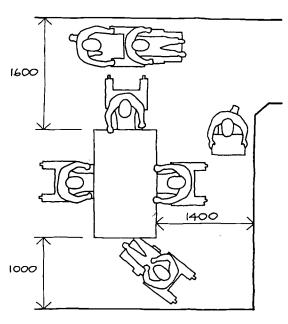
#### Sources

- DfEE Constructional Standards
- Building Regulations 1992, Part M Approved Document
- 'Designing for Accessibility' (CAE)
- Buildings for All to Use' (CIRIA)
- BS CP 5810: 1979
- DfEE Building Bulletin 77 'Designing for Pupils with Special Educational Needs, Special Schools'.



# **H** Fixtures, fittings and equipment

4.15 The installation of fittings, fixtures and equipment, as well as the layout of loose furniture should take into account possible use by people with disabilities. Shelving, where possible, should be reachable from standing or seated height. Counters and tables should allow knee room for wheelchair users. Any counter or servery should have a lowered section for use from a seated position. On long routes, seating should be provided at intervals with space for a wheelchair alongside. Layouts of tables, chairs, fixtures and fittings, should allow for wheelchair manoeuvre space.



Space requirements around all table sizes

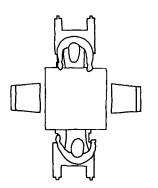


Table size 900×900

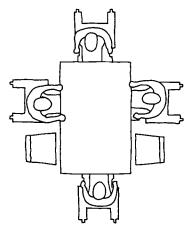


Table size 1650×1050

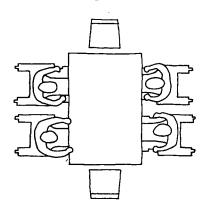


Table size 1650 x 1050

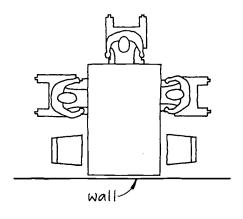


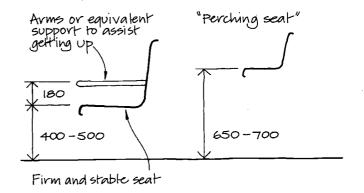
Table size 1650 x 1050

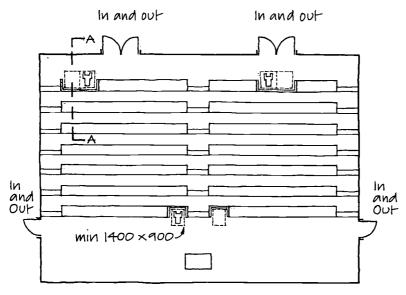




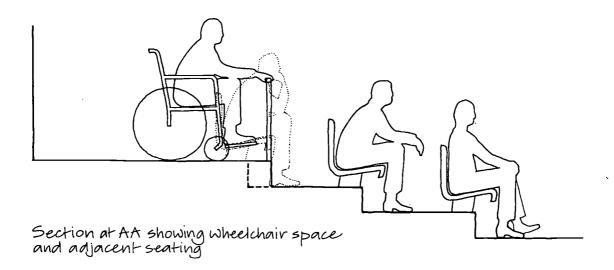
## 4.16 To achieve these objectives:

- Fixed seating should be at a height of 400/500mm, preferably with arms for additional support and help with standing.
- All seating, whether fixed of loose, should be stable.



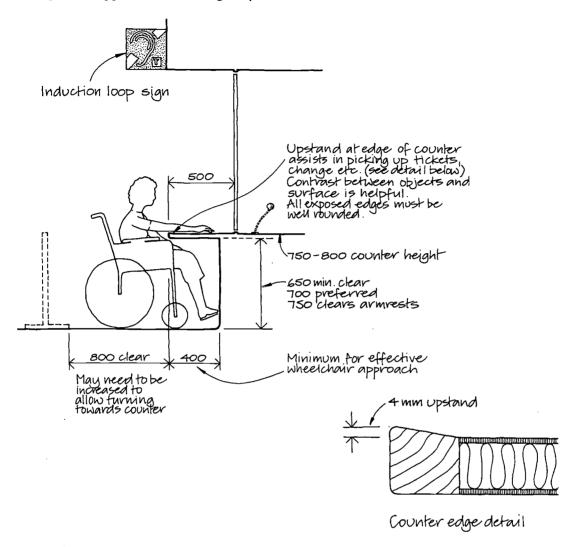


Plan of a lecture theatre Useful locations for wheelchair spaces Each space to be minimum 1400 deep × 900 wide





• Any counter, for instance in libraries or at school offices, should have knee space for wheelchair users and at least part of the surface at a height of 750/800mm. There should also be sufficient manoeuvre space for approach and turning away.



- Lighting at glazed counters should not cause reflections that reduce the scope for lip-reading. Downlights should not be used as they make lipreading more difficult.
- At fixed information points such as the school office or library, an induction loop system can provide hearing-aid assistance.
- When laying out seating such as in assembly areas, particularly for events attended by parents and other visitors, review sightlines/lighting/hearing aid assistance (perhaps with the provision of an induction loop system)/and wheelchair manoeuvre space.
- Blinds, or blackout should help to ensure that projected images can be clearly seen by people with impaired vision.
- Blinds or other solar controls should be used to ensure that low sunlight (particularly in winter), does not impair visual conditions for those with sensory disabilities.

#### Sources

- DfEE Constructional Standards
- 'Designing for Accessibility' (CAE)

BESTCOPYAVAILABLE

• Buildings for All to Use' (CIRIA)



#### Information and controls, J

## including lighting, heating, communications, safety & security

4.17 The adequate provision of information and communication facilities, and the scope for the independent operation of controls are all fundamental to enabling people with disabilities to use buildings without having to be assisted by others. The identification of the needs of people with sensory disabilities in the DDA means that greatly increased significance must attach to the installation of signs and information, telephones and other communication devices, hearing-aid assistance, security systems, lighting and controls. Good lighting is essential for people with visual disabilities but is equally important for those with hearing disabilities who need to be able to lip-read and use sign language. The legibility and effectiveness of signage will depend upon consistency, word shape recognition through the use of upper and lower case, and contrast against background. Security systems can present particular problems for people with visual disabilities with small key pads and obscured displays. Heights of controls and the ease with which they can be read and operated will make the difference between dependence and independence. The selection of surfaces will also be very important to people with disabilities; they can make the difference between a building that is easy and comfortable to use or one that is confusing, hazardous and off-putting.

## 4.18 To achieve these objectives:

### Lighting

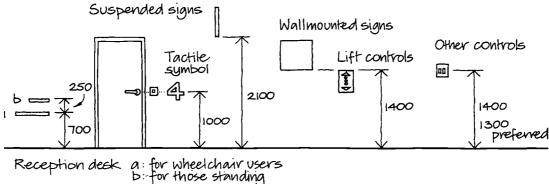
- Lighting should meet the needs of the individual and the task on which they are working.
- Lighting can be used to enhance the impact of variation in colour and texture, consequently providing visual cues which will assist people with visual disabilities or who may lack comprehension.
- Uplighting, set above standing eye level, can be especially helpful in providing a glare-free environment.
- Fluorescent lighting can create a magnetic field which can cause a hum in hearing aids. It should be selected or positioned to avoid such interference.

### Services, including heating:

- Fan-assisted heating systems should be such as to add minimally to background noise levels.
- The main power supply cable to a building generates a considerable magnetic field which may generate a hum in hearing aids. Its position should be clearly located and communal activities avoided in its vicinity.

#### Controls

- Tone and colour contrast should be used to ensure that controls, including door furniture, are clearly distinguished from their back-ground.
- Controls conveying information, as for lifts, should have adjacent raised letters and braille embossing.



Critical heights for signs, symbols and other circulation fittings

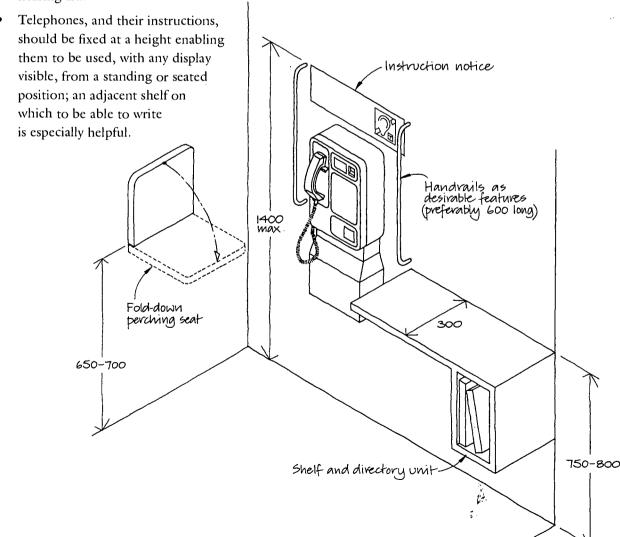


### Hearing aid assistance

- Induction loop systems convert sound via a microphone into a magnetic field within the circuit of the loop cable. An individual within the field will be able to receive the sound, amplified by their hearing-aid, and with background noise eliminated.
- Induction loop systems are particularly suitable where information is given, and communication takes place from a fixed point, such as at reception, in lecture rooms and assembly halls. Radio systems are now also suitable and may be considered for use in classrooms.
- Sound can 'spill' out of the field and there can be overlap where loop systems are located near each other. This may make a loop system inappropriate where confidentiality is required; an infrared system can avoid this problem.
- Infrared systems convert sound into light and back again requiring a microphone, a transmitter and receiver headsets. The system can be especially useful where translation is required, is portable and can be hired for specific events. Radiowave systems may be considered.

## Telephones

- Pay phones are a great help to people with disabilities, for instance for someone with impaired mobility to call for a taxi, and where provided should be located near to the school office reception.
- Any payphone should have an inductive coupler for use with a hearing aid.

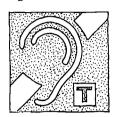




C 42

## Signs

- Signs should use upper and lower case lettering, with letters contrasted against their background by tone and/or colour.
- Signs within reach which have embossed letters/symbols/braille can be helpful to people with visual disabilities.
- Signs reassure as well as inform, and gaps in signage should be avoided on long routes.



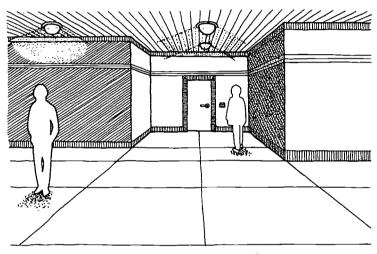
Hearing aid assistance

## Surfaces

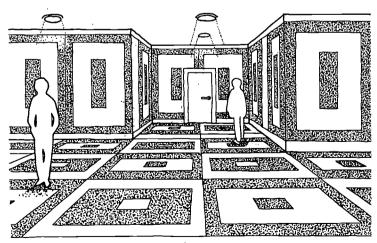
- Hard wall and floor surfaces increase sound reverberation and echo and can cause acoustic confusion.
- Glossy wall and floor surfaces give rise to reflections and possible glare which can cause visual confusion.
- For ease of wheelchair use, floor surfaces should be firm or hard, well fixed, and non directional. Junctions between surfaces should not create a tripping hazard, and should avoid visual confusion, for instance by appearing to suggest a step or change of level where none exists.
- Tone and colour contrast should be used to inform.
- Textured surfaces help to inform people with visual disabilities. Texture contrast in floors can provide informative cues as can the difference between resilience and firmness.
- Floor surfaces should be slip-resistant, even when wet.
- Brightly contrasted and bold patterns to floor and wall coverings and curtains will cause confusion for people with visual disabilities, and will make difficulties for people with hearing disabilities who have to lipread or read sign language against such a background.



Upper and lower case signage



Contrast is important to help distinguish between different planes



Contrast is confusing if used within each plane, especially the floor plane



## Alarm and security installations

- Audible alarms can, with benefit, be supplemented by visual alarms where hearing impaired people are likely to be present. Individual alarm activated vibratory devices can be useful in specific instances.
- Entryphone systems should have an LED display for people with hearing disabilities. Digital pad and 'swipe card' operated systems should be located where they can be operated from seated or standing height.

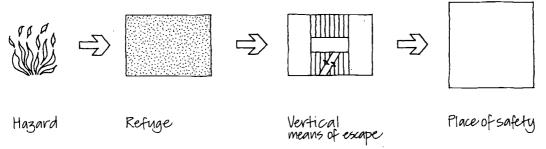
### Sources

- DfEE Constructional Standards
- 'Designing for Accessibility' (CAE)
- 'Buildings for All to Use' (CIRIA)
- 'Building Sight' (RNIB)
- RNID Technical Department, Induction loop systems guidance



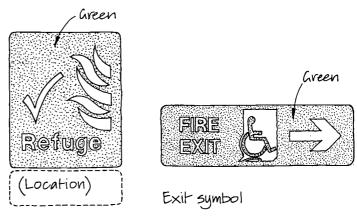
## **K** Means of escape

- 4.19 Schools can act as places of public assembly and as such require licensing by the Magistrates who are usually advised by the Fire Officer as to fire safety requirements. The Building Regulations Approved Document Part B, B1, 'Means of escape', makes specific reference to BS5588 Fire Precautions in the Design, Construction and Use of Buildings: Part 8: Code of Practice for Means of Escape for Disabled People. The Code is also particularly significant in providing guidance on the effective management of evacuation when construction has been completed. It is being substantially revised and expanded with particular reference to management procedures and bringing it into line with The Fire Precautions (Places of Work) Regulations 1997; it is therefore especially relevant to the implementation of the DDA (see Section 5 which follows).
- 4.20 As well as introducing guidance for building owners and managers on means of escape BS5588: Part 8 adopts a radical approach in acknowledging that some people, particularly those with disabilities, may require assistance to evacuate from a building in an emergency. It therefore introduced the concepts of progressive horizontal evacuation on the same level, the refuge, vertical evacuation and the evacuation lift. In designing the provision for means of escape the requirements of DfEE 1997 Constructional Standards will be met if the Code is followed



## Principles of evacuation

- 4.21 To achieve that objective:
  - An 'evacuation strategy' should be put in place, with responsibility allocated to individual members of staff for the assisted evacuation of people with disabilities, and they are given appropriate training.
  - That strategy should be regularly reviewed and checked for its effectiveness.
  - It should include the routine checking of evacuation routes to ensure that they are kept unobstructed, free of combustible materials, and that whilst appropriate doors are kept locked, others can be opened in spite of security requirements.



BEST COPY AVAILABLE

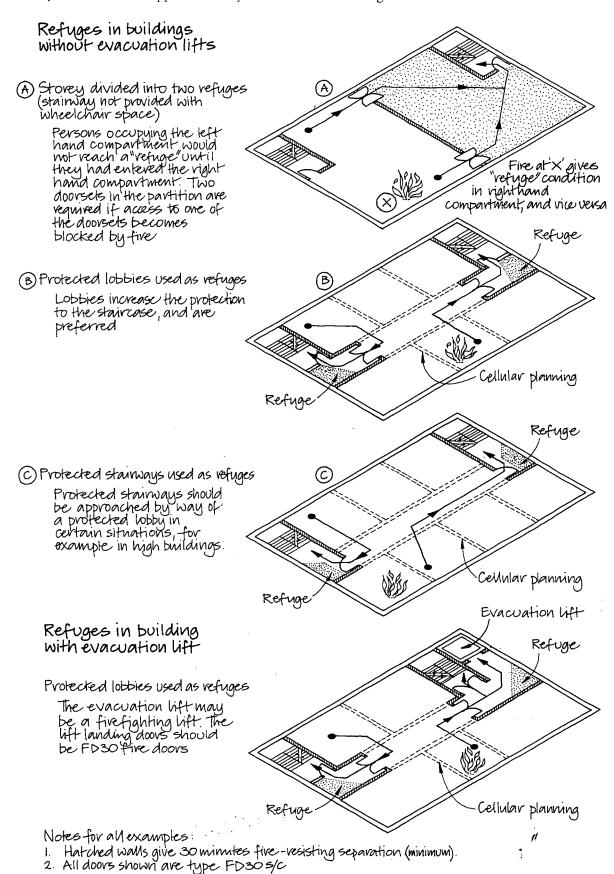
Refuge sign and location

Location reference example:

Refuge 5 Stairwell 3 Floor 2

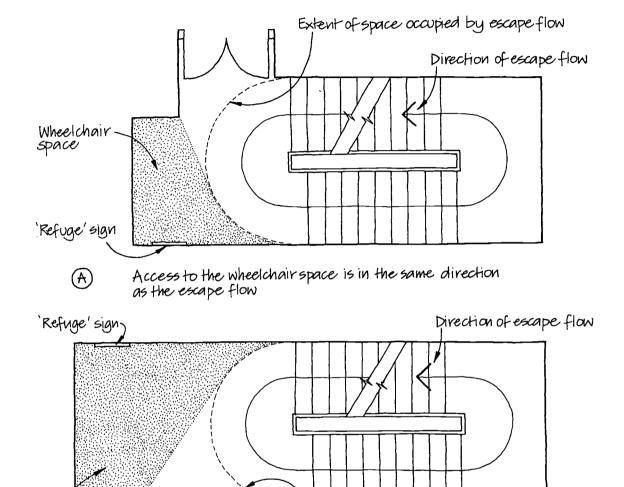


- It should include routine checking of detectors and warning devices.
- In parts of the building which may be used by people with hearing impairments the audible alarm system should be supplemented by visual means of warning.





- Individual vibratory devices, activated by operation of the central alarm system, may be appropriate in some cases.
- In multi-storey buildings the introduction of at least one 'evacuation lift' with a protected power supply should be considered.
- In multi-storey buildings refuges should be identified and appropriately signposted and adequately sized.



B Access to the wheelchair spaces is against the escape flow

Wheel chair spaces in protected stairways

3° 4°

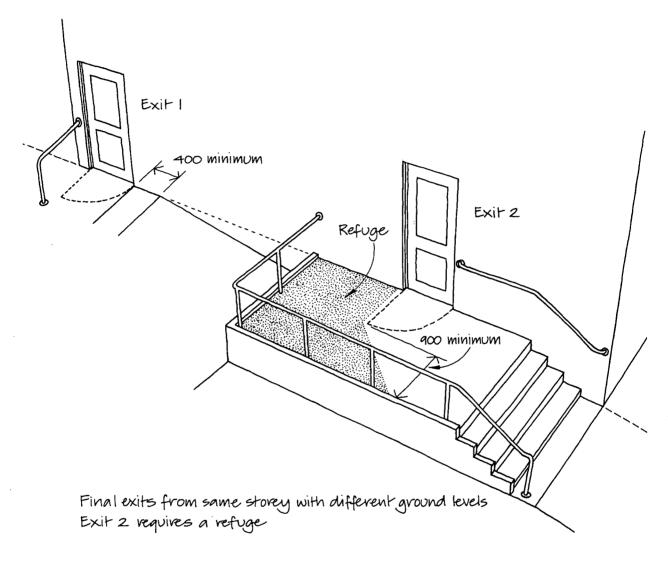
Move than one wheelchair space

## **BESTCOPY AVAILABLE**

Extent of space occupied by escape flow



- Where a refuge is not related to an 'evacuation lift' the provision of the means of assisted evacuation, such as a 'carry-chair' should be considered.
- Final exit routes from buildings, particularly where they are related to vertical evacuation, should be as accessible to wheelchair users as are entry routes. If steps are necessary at the exit point an external refuge should be formed from which assisted evacuation can be effected, if needs be by the Fire Brigade.



### Sources

- DfEE Constructional Standards
- Building Regulations 1992, Part B Approved Document
- BS 5588: Part 8: 19\*\* Code of Practice for Means of Escape for Disabled People
- 'Designing for Accessibility' (CAE)
- 'Buildings for All to Use" (CIRIA)
- 'Building Sight' (RNIB)
- Guide 6 'Fire Safety' DfEE Facilities Management Series



# 5. Access, Safety and Security

# Risk Assessment and Evacuation Planning; Management Issues

- 5.01 Recent events involving wholly unexpected attacks on both children and staff have prompted schools to introduce extensive security arrangements. In many urban areas particularly there has also proved to be an increasingly frequent and damaging incidence of vandalism. In consequence, schools now tend to have restricted and closely monitored access, often at a single point of entry. All exits from the buildings, including fire exits, tend to be secured, with door furniture which can be released from the interior for emergency evacuation, but can only be opened externally, if at all, by key operation. Windows too, particularly at ground floor level, now tend to be security latched and restricted, and doors and windows may well be alarm linked. All such measures, whilst regrettably necessary to protect the occupants, reduce the accessibility of buildings giving rise to conflicts between security, safety and accessibility.
- 5.02 Some of the difficulties arising from these conflicts can be resolved through appropriate specification of push bar or lever operated door furniture, for instance, together with the addition of door bells to signal for help. But, in addition, many problems can be overcome by modified management procedures and staff training.

## Procedures in case of fire

- 5.11 Evacuation procedures should be pre-planned by those having control of buildings together with the fire authority. It is essential to identify the needs of disabled people and to make arrangements for their assistance. Staff training and knowledge of how to implement procedures are a vital part of any effective evacuation programme, and should be confirmed in writing. The procedures should be tested at least once a year, and any amendments also confirmed in writing.
- 5.12 Schools are workplaces, and all employees should have appropriate training in evacuation procedures.
- 5.13 In the event of an evacuation as the result of a fire some disabled people may temporarily rest in

- refuges while waiting for help to move to a final exit and safety. In that event there are a number of essential communications requirements.
- 5.14 Those organizing the evacuation of the building need to know:
  - how many disabled people there are
  - the nature of their disabilities
  - the refuge or refuges in which they are located.
- 5.15 The disabled people in each refuge need to be reassured that their presence there is known to the building management.
- 5.16 In order to meet these requirements there needs to be a system of two-way communication, usable by disabled people, between those waiting in a refuge and those organizing the evacuation.
- 5.17 It is also important that evacuation organizers understand the techniques for assisting disabled people. For instance, how those with visual disabilities may need a sighted helper to walk just ahead of them, having taken his or her arm and allowing them to take movement cues from the helper; or how a wheelchair user should be carried, preferably in his or her own wheelchair. (Guidance can be sought from the organizations listed in Appendix A.)
- 5.18 Guidance on the use of 'Evacuation Lifts', and the procedures for staff in their operation is to be found in BS 5588, Part 8, referred to in Appendix A, as are examples of fire plan strategies in buildings provided with evacuation lifts.
- 5.19 In buildings without evacuation lifts the recommended sequence for evacuation is as follows:
  - On hearing the alarm, disabled people move to the nearest refuge.
  - The designated competent person, after completing their evacuation/search procedure, moves to the refuge.
  - Disabled persons at the refuge(s) are assisted down (up) the stairway towards the final exit level.



5,49

## Fire alarm systems

- 5.21 In the event of a fire it is essential that all the occupants of the building are alerted as speedily as possible. Any fire alarm system installed for the majority of building users and complying with BS 5839: Part 1 should also be suitable for disabled people. This might mean, for instance, that audible alarm signals may need to be supplemented by visual signals. These should be the subject of consultation with the fire authority as, generally, hearing-disabled people will either be able to perceive an audible alarm signal, or they may reliably be alerted by other occupants.
- 5.22 The recommendations given in BS 5839 Part 1 for the number and siting of manual call points should be adequate for the speedy initiation of the fire alarm at most schools. As a disabled person is as likely as any other to need to raise the alarm, consideration should also be given to
  - the provision of an automatic fire detection system
  - a reduction in the spacing between manual call points to compensate for delays in operation because of the limited mobility of the occupants
  - the provision of alternative manually operated switching devices (eg. ceiling cord switches, etc.) additional to those recommended in BS 5839: Part 1, where operation of the manual call points is likely to be difficult or seriously delayed because of the occupants' disabilities.
- 5.23 In certain situations such as a generally noisy area where audible alarms may not be heard by a hearing impaired person, especially one who might be working on their own, alternative types of alarm signal may be necessary, such as visual alarms, paging systems, vibrating devices or sound signals within carefully selected frequency bands. The type of alarm chosen should be appropriate in relation to the activities being carried out in the areas being considered. Technical guidance on the selection of suitable devices may be obtained from the RNID 19-23 Featherstone Street, London EC1Y 8SL. (Technical aids / adaptations supplier, RNID/

Sound Advantage, 1 Metro Centre, Welbeck Way, Peterborough PE2 7UH)

## **Management**

5.31 Accessibility cannot be achieved only by good design. The way that a building is managed and operated, day by day, will also do much to determine how accessible it is for disabled people. All too frequently clear passage through a corridor is compromised by 'temporary' storage of boxes; the addition of ad hoc signs compromises an effective signage system; the installation of an induction loop system is rendered ineffective because its presence is not publicised. The issue of accessibility should be touched upon in all parts of any Building Management Manual, as well as being identified as a section in its own right The reasoning behind requirements should be explained, and . the kind of information given might be as follows:

## Car parking

• Ensure that non-disabled drivers do not occupy spaces provide for disabled people.

### Routes

 Ensure that external routes, ramps and steps are kept clean and unobstructed, free of leaves and of ice and snow in winter.

### Doors

• Ensure that door closers are regularly maintained, pressure is kept to the minimum necessary, and that door furniture is clean and freemoving.

### Horizontal movement

 Ensure that spaces needed for wheelchair manoeuvre, or used by people with impaired vision are not obstructed by deliveries or storage.

## Vertical movement

• Ensure that any lift car levels accurately and that short rise lifts are not abused.

#### Lavatories

 Ensure that supplies of toilet paper and paper towels are regularly replenished without wc spaces being used for 'unofficial' storage.



 Also ensure that suppliers and contractors, such as disposal sanitary disposal do not compromise transfer space by placement of their bins.

### Signs

 Ensure that ad hoc signs are replaced by signs integrated into the signage system, and that they are correctly refixed after redecoration.

### Induction loop systems

ensure that installations are publicised and checked regularly

## Alarms and security

• Ensure that alarm systems, including any assistance call provisions from wc's, are checked regularly, and that new staff are trained in alarm response procedures.

#### Surfaces

- Ensure that cleaning and polishing procedures do not render slip-resistant surfaces ineffective.
- Also ensure that flooring material junctions do not become worn or mats loosened to form a tripping hazard.
- Also ensure that when redecoration takes
  place it does not compromise valuable
  existing provision of cues, contrast and tone
  and replaces it if necessary in relation to such
  items as door frames, control panels, signs,
  etc.

## Lighting

- Ensure that windows, lamps and blinds are kept clean in order to avoid loss of light and deterioration in light quality.
- Also ensure that blown lamps and tubes which have failed or are starting to flicker are replaced immediately.
- 5.32 There may be further sections, relating specifically to the particular building and its functions. As accessibility issues emerge, they should give rise to the addition of new sections to the manual, with guidance provided on problem resolution and prevention.



## 6. Appendix 'A' Information Sources and References

6.01 Centre for Accessible Environments,

Nutmeg House, 60 Gainsford Street, London SE1 2NY

Tel: 0171 357 8182; Fax: 0171 357 8183

The Centre offers information services and training in relation to disability and built environments, and offers an extensive range of publications.

#### References:

Designing for Accessibility - An Introductory
Guide

Tessa Palfreyman, 1993 (updated 1994)

ISBN: 0 903976 23 4

Specifier's Handbook 1, Electrical Controls

Tessa Palfreyman, 1990 ISBN: 0 903976 21 1

Specifier's Handbook 2, Wheelchair Stairlifts and

Platform Lifts

Stephen Thorpe, 1993 ISBN: 0 903976 24 2

Good Loo Design Guide Stephen Thorpe, 1988

ISBN: 0 903976 20 Wheelchair Template

Stephen Thorpe, 1991

6.02 CIRIA (Construction Industry Research and Information Association),

6 Storey's Gate, London SW1P 3AU

Tel: 0171 222 8891; Fax: 0171 222 1708;

Publications: 0171 799 3243

Reference:

Buildings for All to Use - Good Practice Guidance for Improving Existing Public Buildings for People with Disabilities

Sylvester Bone, 1996

Comprehensive guidance prepared in anticipation of the DDA.

6.03 DETR (Department of the Environment, Transport and the Regions)

Eland House, Bressenden Place, London

SW1E 5DU

Tel: 0171 890 3000

References:

The Building Regulations, 1991 (1992 edition)
Approved Document M: Access and Facilities for

Disabled People HMSO, 1991

ISBN: 0 11 752447 6

Approved Document B: Fire Safety

HMSO, 1991

ISBN: 0 11 752313 5

HMSO Publications Centre, PO Box 276,

London SW8 5DT

Tel: 0870 600 5522

6.04 English Heritage,

Customer Services, PO Box 9019,

London W1A 0JA

Tel: 0171 973 3434

Reference:

Easy Access to Historic Properties, 1995

Statement of policy and setting out guidance in relation to achieving access to historic buildings. Essential reference when adapting and altering

Listed Buildings.

6.05 BSI (British Standards Institution),

389 Chiswick High Road,

London W4 4AL

Tel: 0181 996 9000; Fax: 0181 996 7400

References:

BS5810 1979 Code of Practice for Access for the

Disabled to Buildings ISBN: 0 580 10977 1

BS5588 Part 8:1988 Fire Precautions in the

Design, Construction and Use of Buildings - Code of Practice for Means of Escape for Disabled People

ISBN: 0 580 16408 X

6.06 RNIB (Royal National Institute for the Blind),224 Great Portland Street, London W1N 6AA

Tel: 0171 388 1266; Fax: 0171 388 2034

Reference:

Building Sight

Peter Barker et al., 1995

Comprehensive design guidance for people with visual disabilities.



6.07 RNID (Royal National Institute for Deaf People),

19-23 Featherstone Street, London EC1Y 8SL

Tel: 0171 296 8000; Fax: 0171 296 8199

Reference:

Louder Than Words Alec Miskin, 1995

Induction Loops in Public Places Leaflet, 1998

Design and technical guidance, plus technical advisory and installation service.

6.08 DfEE (Department for Education and Employment), Architects and Building Branch, Caxton House, 6–12 Tothill Street, London SW1H 9NF

Tel: 0171 273 3000; Fax: 0171 273 6762

References:

1997 Constructional Standards

DfEE, 1997

Six pages gratis available from DfEE Architects and Building Branch.

What the Disability Discrimination Act (DDA) Means for Schools and LEAS (DfEE Circular Number 3/97)

DfEE, 1997

Designing for Children with Special Educational

Needs: Ordinary Schools (Building Bulletin 61)

HMSO, 1984

ISBN: 0 11 270313 5

(NB: This book is now out of print.)

Designing for Pupils with Special Educational

Needs: Special Schools (Building Bulletin 77)

HMSO, 1992

ISBN: 0 11 270796 3

Guidelines for Environmental Design in Schools (Revision of Design Note 17, Building

Bulletin 87)

The Stationery Office, 1999

ISBN: 0 11 271041 7

Lighting Design for Schools

(Building Bulletin 90)

The Stationery Office, 1999

ISBN: 0 11 271041 7

Facilities Management Series Guide 6: Fire Safety

The Stationery Office, 1999

ISBN: 0 11 271040 9

Excellence for all Children: Meeting Special

Educational Needs

(Cm 3785)

The Stationery Office, 1997

ISBN: 0 10 137852 1

DfEE Publications, PO Box 5050, Sherwood Park, Annesley, Nottingham NG15 0DJ

6.09 HM Government

Disability Discrimination Act 1995

(Chapter 50)

HMSO, 1995

ISBN: 01 10 545095 2

6.10 Further advice and reference can be obtained by

contacting:

John H Penton,

Consultant Architect & Designer,

8 Spicer Street, St Albans, Herts AL3 4PQ

Tel: 01727 868873; Fax: 01727 852376



# 7. Appendix 'B' Accessibility Audit Pro-formas

### ACCESS AUDIT CHECKLIST

ref	title	sheet no.
A	Approach and car parking	01
В	Routes and external level change, including ramps and steps	02
C	Entrances, including reception	03/04
D	Horizontal movement and assembly	05/06
E	Vertical movement and internal level change	07/08/09
F	Doors	10
G	Lavatories	11/12
H	Fixtures and fittings	13
J	Information	14
K	Means of escape	15
S	Supplementary ( referenced S/01, S/02 etc )	S/

- Checklist sheets should be completed with relevance to all the specific areas to which they apply.
- Supplementary sheets should be attached as necessary. More than one checklist sheet should be used for differing areas when appropriate, e.g. when a number of individual buildings or departments may be involved.
- Boxes should be completed, or left blank, in relation to those areas surveyed, and deletions made where
  choices can be eliminated. A blank should be seen as a positive means of completing the pro-forma,
  reflecting a situation which can be assessed as essentially neutral or satisfactory.
- It is intended that the checklist sheets should be photocopied.

		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>01</b> Page No.
'A'	Αp	proach and car parking	<u>.</u>					nsior	
Dat Loc No.	atio	n: Item	🗴 Wheelchair	🗙 Ambulant	X Dexterity	🗴 Visual	🗙 Auditory	X Comprehension	
		✓ or X as applicable							note
1.		Is the building within convenient walking distance of:							(+ reverse)
		(a) a public highway?							
		(b) public transport?							
		(c) car parking?							
2.		Is the route clearly marked/found?							
3.		Is the route free of kerbs?							
4.		Is the surface smooth and slip resistant?							
5.		Is the route wide enough?							
6.		Is it free of such hazards as bollards, litter bins, outward opening windows and doors or overhanging projections?							
7.		Is it adequately lit?							
8.		ls it identified by visual, audible and tactile information?							
9.		Is there car parking for people with reduced mobility?							
10.		Is it clearly marked out, signed, easily found and kept free from misuse?				·			
11.		Is it as near the entrance as possible?							
12.		Is it suitably surfaced?							
13.		Is the route to the building kept free of snow, ice and fallen leaves?							
14.	Ш	Is the route level (ie. no gradient steeper than 1:20 and no steps)?							





		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>02</b> Page No.
'B'		outes and external level change. Cluding ramps and steps	ıair	¥				nensior	
Dat Loc No.	atio	n: Item	🗙 Wheelchair	🗙 Ambulant	X Dexterity	🗴 Visual	X Auditory	🗙 Comprehension	
		✓ or X as applicable	·	Ĭ	·	·	·	·	note (+ reverse)
1.		Is there a ramp, with level surfaces at <b>top/intermediate/bottom?</b> (delete)							
2.		Is it wide enough and suitably graded?							
3.		Is the surface slip resistant?							
4.		Are there kerbs and are there edges protected to prevent accidents?							
5.		Are there handrails to <b>one</b> or <b>both</b> sides? (delete)				. 🔲			
6.		If a permanent ramp (or regraded levels) cannot be formed (perhaps to a Listed Building) is a portable ramp available?							
7.		Are there (alternative) steps? (delete)							
8.		Identified by visual/tactile information?							
9.		Are there handrails to <b>one</b> or <b>both</b> sides? (delete)							
10.		Are ramps and steps adequately lit?							
11.		Are treads and risers consistent in depth and height?							
12.		Are all nosings of marked and/or <b>readily identifiable</b> ? (delete)							
13.		Are landings of <b>adequate size</b> and are they provided at <b>intermediate levels</b> in long flights? (delete)							
14.		If safe and convenient ramps and steps cannot be provided is vertical movement by powered means an alternative? see checklist E, sheets 8 and 9							



		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>03</b> Page No.
'C'	En	trances, including reception	_					nsior	
Dat Loc No	atio	n: Item	<b>X</b> Wheelchair	🗙 Ambulant	X Dexterity	🗶 Visual	X Auditory	🗙 Comprehension	
		✓ or X as applicable	·	•		•	•	•	note (+ reverse)
1.		Is the door clearly distinguishable from the facade?							
2.		If glass is it visible when closed?							
3.		Does the clear <b>door opening</b> or <b>one leaf</b> when opened permit passage of a wheelchair or double buggy? (delete)							
4.		Does it have a <b>level or flush</b> threshold, and <b>a recessed matwell</b> ? (delete)							
5.		Is there visibility through the <b>door/way</b> from both sides at <b>standing</b> and <b>seated</b> levels? (delete)							
6.		Is there a minimum 300mm wide wheelchair manoeuvre space beside the leading edge of the door to clear doorswing?							
7.		Can the door furniture be used at both standing and seated height? (delete)							
8.		Can it be easily grasped and operated?							
9.		If the door has a closer mechanism does it have:							
		(a) delayed closure action?							
		(b) slow-action closer?							
		(c) minimal closure pressure?							
10.		If the door is power-operated does it have visual and tactile information?							
11.		If the door is security-protected is the system suitable for use by and within reach of people with sensory or mobility impairments?							
		(continued)							



			ty Audit Report: JDIT CHECKLIST							_	Sheet: <b>04</b> Page No.
'C'			nces, including reception nued)		air	ŧ	_			hensior	
Dat Loc No.	atio	n: Iten	n		. Wheelchair	Ambulant	Dexterity	Visual	Auditory	Comprehension	
		✓	or <b>X</b> as applicable		X	X	X	X	X	X	note (+ reverse)
12.		If th	nere is a lobby, do the inner and er doors meet the same criteria?								(+ levelse)
13.		Do one	lobby layouts enable all users to door before going through the	clear next?							
14.		tho	signs designed and positioned to se with visual impairments and v rs with reduced eye-levels?	o inform vheelchair							
15.		Doe the	es the lighting installation take ac needs of visuallly disabled peopl	ccount of e?							
16.		Are	floor surfaces:								
		(a)	slip-resistant, even when wet?								
		(b)	so hard that thery cause acoust	cic confusion?							
		(c)	firm for wheelchair manoeuvre	?							
17.		pres	junctions between floor surfaces sent tripping hazards or cause vis fusion?								
18.		and	ny reception point suitable for ap use from both sides by people in ading and seated positions?	pproach n							
19.		ls it	fitted with an induction loop?								
20.			ublic telephone is available (say eception, is it, and its instruction	e).							
		(a)	•								
		(b)	equipped with inductive coupli	ng?							
21.		buil sup	those progressing to other parts ding is information provided by s ported by tactile information suc o or model?	signs,							



	-	Audit Report: DIT CHECKLIST							Page No.
		ntal movement and assembly						sion	
Dat Loc No.	n: Item		🗙 Wheelchair	🗙 Ambulant	🗴 Dexterity	🗴 Visual	🗙 Auditory	🗙 Comprehension	
	✓ (	or <b>X</b> as applicable							note (+ reverse)
1.	enou	y corridor/passageway/aisle wide ugh for a wheelchar user to manoeuvre for other people to pass?							
2.	whe	y corridor, etc, free from obstruction elchair users and hazards to people impaired vision?							
3.	to cl	any lobbies allow users, (inc, w.ch. users) ear one door before approaching the next minimal manoeuvre?							
4.	ls tu	rning space available for w.ch. users?							
5.	Do r glare	natural and artificial lighting avoid e and silhouetting?							
6.	Are	there visual clues for orientation?							
7.	Do f	loor surfaces:							
	(a)	allow ease of movement for wheelchair users?							
	(b)	avoid light reflection and sound reverberation?							
8.		extured surfaces convey useful information beople with impaired vision?							
9.	of es eye l (dele	direction or information signs (inc means scape) visible from both sitting and standing levels, and are they in <b>upper</b> and <b>lower</b> case ete), and large enough type to be read by e with impaired vision?							
10.		there tactile signs and information for those impaired vision?							
11.		e maintenance of these items ked regularly?							
	(con	tinued)							



		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>06</b> Page No.
Date	( <b>co</b>	orizontal movement and assembly ontinued)  n:	<b>X</b> Wheelchair	🗙 Ambulant	X Dexterity	X Visual	X Auditory	🗙 Comprehension	
		✓ or X as applicable	•	•	•	•	•	•	note (+ reverse)
12.		Is lighting designed to meet a wide range of needs?							
13.		Is sufficient circulation space allowed for wheelchair users?							
14.		Is it maintained clear of obstructions which could create hazards for people with visual disabilities?							
15.		Are seating arrangements/spaces suitable for use by people with visual disabilities?							
16.		Are all areas for assembly/meeting equipped with an induction loop system?							
17.		If the use of an induction loop system is precluded is an infra-red system checked regularly?							
18.		Is the functioning and operation of the induction loop or infra-red system checked regularly?							
19.		Are telephones fitted with inductive loop couplers?							
20.		la a minicom available for se by people with hearing disabilities?							



		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>U/</b> Page No.
'E'		rtical movement and internal relchange	air	<b>+</b>	_		_	hensior	
Dat Loca No.	atior	n: Item	🗙 Wheelchair	X Ambulant	X Dexterity	X Visual	X Auditory	🗙 Comprehension	
		✓ or X as applicable	·	·					note (+ reverse)
1.		Is the location of any <b>step/stairs/ramp</b> clearly indicated by use of <b>sign/colour/contrast/texture lighting</b> ? (delete)							
2.		Does any <b>step/stairs/ramp</b> have a handrail to to <b>one/both</b> side(s), and do(es) <b>it/they</b> extend 300mm beyond the top and bottom of any flight? (delete)							
3.		Is any level change clearly lit?							
4.		Is the pitch (risers & treads) of <b>step/stairs</b> or any <b>ramp</b> consistent, and are nosings clearly identifiable? (delete)							
5.		If there are landings are they large enough to permit passing and turning manoeuvres, and are they provided in any long flight?							
6.		Is any short rise within a single storey ramped; if so is the ramped surface indicated, and is it slip-resistant?							
7.		Does any ramp pitch exceed 1:12/1:16/1:20? (delete)							
8.		If a permanent ramp cannot be provided (perhaps a <b>Listed Building</b> ) can a moveable ramp be made available?							
9.		Are steps available as an alternative to any ramp or ramped surface?							
10.		Where level change is less than a full storey in height is a power-operated system appropriate? ( <b>Platform Lift/Stairlift/Lift</b> - see 11, 12 & 13)? (delete)							
		(continued)							



		ity Audit Report: AUDIT CHECKLIST						_	Sheet: <b>08</b> Page No.
'E'		cal movement and internal change (continued)	hair	nt	>-		>	hension	
Date Loca No.	ation:	em	🗙 Wheelchair	🗙 Ambulant	X Dexterity	🗴 Visual	🗶 Auditory	🗙 Comprehension	
	•	or <b>X</b> as applicable	·	•	•	·	·	·	note (+ reverse)
11.	☐ P	atform Lift (delete)							
	(a	) Are the controls at both levels identifiable, and reachable from <b>sitting</b> and <b>standing</b> levels? (delete)					1		
	(b	) Is the platform adequate for wheelchair use and manoeuvre?							
	(0	) In the event of a power failure does the platform return to lower level?							
	(0	) Is the equipment maintained and its operation checked regularly?							
12.	☐ S	tairlift (delete)							
	(a	) Are the controls at all levels identifiable, and reachable from <b>sitting</b> and <b>standing</b> levels? (delete)							
	(t	) Is the platform adequate for wheelchair use and manoeuvre?							
	(c	) Is approach <b>convenient</b> and <b>safe</b> at all appropriate landings? (delete)							
	(c	Does the stairlift have a 'Soft-start' action?							
	(€	When not in use is the platform powered to fold away to avoid obstruction?							
	(f	In the event of a power failure does the platform return to lower level?							
	( <u>c</u>	l) Is the equipment maintained and its operation checked regularly?							
	(c	ontinued)							



Accessibility Audit Report: ACCESS AUDIT CHECKLIST									Sheet: <b>09</b> Page No.
		l movement and internal hange (continued)	air	Ħ	`			Comprehension	
Date:			Wheelchair	Ambulant	Dexterity	<del>a</del>	Auditory	npre	
Locati No.	on: Item		Whe	Aml	Dex	Visual	Aud	Con	
	10011		X	X	X	X	X	X	
	✓	or 🗴 as applicable							note (+ reverse)
13. 🗆	Lift								(1,10,00)
	(a)	Is the lift's location clearly defined by <b>visual</b> and <b>tactile</b> information? (delete)						□ .	
	(b)	Are controls at all floors visible, identifiable and reachable from <b>sitting</b> and <b>standing</b> levels? (delete)						□ .	
	(c)	Is there adequate, unobstructed space at each floor lift entry for wheelchair manoeuvre?						□ .	
	(d)	Does the lift door open widely enough for wheelchair user access?							
	(e)	Does door operation allow slow entry and exit?						□ .	
	(f)	Do the lift car internal dimensions allow sufficient space for a <b>wheelchair user</b> and <b>carer</b> ? (delete)						□ .	
	(g)	Does the car have appropriate support rails?							
	(h)	Are the lift car controls. inc. emergency call, located within reach of all users and with visual and tactile nformation?						□ .	
	(i)	Is there audible floor indication?							
	(j)	Is the lift an ' <b>Evacuation Lift</b> '? (see Means of Escape, Sheet 16)							
	(k)	Is the lift regularly maintained and its	П						



		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>10</b> Page No.
'F'	Do	oors	_					nsior	
Dat Loc No.	atio	n: Item	🗴 Wheelchair	🗙 Ambulant	X Dexterity	🗶 Visual	X Auditory	X Comprehension	
		✓ or X as applicable							note (+ reverse)
1.		Do the doors serve a <b>functional/safety</b> purpose? (delete)							
2.		Can they be readily distinguished?							
3.		If glass, are they visible when shut?							
4.		Can people <b>standing</b> or <b>sitting</b> in a wheelchair see each other,and be seen from either side of the door? (delete)							
5.		Does the clear opening width permit wheelchair access?							
6.		On the <b>opening</b> side of the door is there sufficient space (300mm) to allow the door handle to be grasped and the door swung past a wheelchair footplate?							
7.		Is any door furniture/handle at a height for standing/sitting use? (delete)							
8.		Are door/handles clearly distinguished?							
9.		Can the door furniture/handles be easily operated/grasped? (delete)							
10.		If <b>door closers</b> / <b>mechanisims</b> are fitted do they provide the following: (delete)							
		(a) security linkage?							
		(b) delay-action closure?							
		(c) slow-action closure?							
		(d) minimum closure pressure?							
11.		Is door/mechanism function checked regularly?							



		S AUDIT CHECKLIST							Sheet: <b>11</b> Page No.
		vatories						sion	
Dat Loc No.	atio	n: Item	<b>X</b> Wheelchair	🗙 Ambulant	X Dexterity	🗴 Visual	X Auditory	🗙 Comprehension	
		✓ or X as applicable							note (+ reverse)
1.		Is WC provision made for people with disabilities?							
2.		Do all lavatory areas have slip-resistant floors?							
3.		Are they easy to distinguish by colour contrast from walls?							
4.		Are all fittings readily distinguishable from their background?							
5.		Are all door fittings/locks easily gripped and operated?							
6.		Can ambulant disabled people manoeuvre and raise and lower themselves in standard cubicles?							
7.		Is provision made for <b>wheelchair users</b> ? If so:							
8.		Is wheelchair approach free of <b>steps / narrow doors / obstructions</b> , etc? (delete)							
9.		Is the location clearly signed?							
10.		Is there sufficient space at entry to the compartment for wheelchair manoeuvre and door opening?							
11.		Are the door fittings/locks and light switches easily reached and operated?							
12.		Is there an emergency call system and is someone designated to respond?							
13.		Can the emergency call system be operated from floor level?							
		(continued)							



	sibility Audit Report: SS AUDIT CHECKLIST						_	Sheet: <b>12</b> Page No.
'G' La	vatories (continued)	_					nsior	
Date: Locatio No.	on:	Wheelchair	Ambulant	Dexterity	Visual	Auditory	Comprehension	
		X	X	X	X	X	X	
	✓ or X as applicable							note (+ reverse)
13.	Is the wheelchair WC compartment large enough to permit manoeuvre for frontal / lateral / angled / backward transfer, with or without assistance? (delete)							
14.	Are the fittings arranged to facilitate these manoeuvres?							
15. 🗆	Are handwashing and drying facilities within reach of someone seated on the WC?							
16.	Is the tap appropriate for use by someone with limited dexterity, grip or strength?							
17.	Are suitable grab rails fitted in all the appropriate positions to facilitate use of the WC?					. 🗆		
18.	Is the manoeuvring area free of obstruction, eg boxed-in pipework / radiators / cleaner's equipment / disposal bins / occasional storage, etc., and is a difficulty caused by the activity of service contractors? (delete)							
19. 🗌	If there is more than one <b>standard layout</b> WC compartment provided, are they handed to offer a left-sided approach and a right-sided approach?							



		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>13</b> Page No.	
'H' Fixtures and fittings								nsior		
Date: Locatio No.		on: Item		🗙 Ambulant	X Dexterity	X Visual	X Auditory	🗙 Comprehension		
		✓ or X as applicable							note (+ reverse)	
1.		Is any <b>servery</b> / <b>counter</b> accessible to all users, including those with hearing impairments?								
2.		If the building has fixed seating are there also associated spaces for wheelchair users and at regular intervals on long routes?								
3.		Is it possible for wheelchair users and people with other disabilities to approach and use all vending machines/drinking water dispensers, etc?								
4.		Is it possible for people with disabilities to serve as volunteers?					-			
5.		Are all fittings readily distinguishable from their background?		·						
6.		Where there are display stands, bookstalls etc. are they <b>visible / reachable / accessible</b> by people with disabilities?								
7.		In any eating/meeting space do tables, chairs and the layout allow for use by wheelchair users and other people with disabilities?								
8.		In any staff accommodation is it suitable for use by people with disabilities, including wheelchair users, with slip-resistant floor, reduced level kitchen units and sink and lever action taps?								
9.		Are all relevant locations clearly signed?								



Acces ACCE:		Sheet: <b>14</b> Page No.						
'J' In	nformation						nsion	
Date: Locatio No.	on:ltem	🗶 Wheelchair	Ambulant	Dexterity	Visual	Auditory	Comprehension	
	✓ or X as applicable	X	X	X	X	X	X	note (+ reverse)
1.	Is the building equipped to provide hearing assistance?							
2.	Does lighting installation of the building take into account the needs of people with visual disabilities?							
3.	Is there a tactile plan or diagram of the building?							
4.	Are there large-print versions of information aboout the <b>building</b> / <b>activities</b> available?							
<b>5</b> . $\Box$	Is there 'Braille' information available for people with visual disabilities?							
6.	Is there an 'audio' version of information about the building available?						□ .	
7.	Where there are staff available in the building at information/refreshment facilities, are they trained in communication with people with <b>physical</b> and <b>sensory disabilities</b> ?						□ .	
8.	Where a payphone is provided does it have a hearing aid coupler?							
9. 🗆	Are all relevant locations clearly signed?							



		sibility Audit Report: S AUDIT CHECKLIST							Sheet: <b>15</b> Page No.	
'K'	Me	eans of escape	_					nsior		
Dat Loc No.	atio	n: Item	🗙 Wheelchair	🗶 Ambulant	X Dexterity	🗶 Visual	X Auditory	🗙 Comprehension		
		✓ or X as applicable							note (+ reverse)	
1.		Is there a <b>visible</b> as well as <b>audible</b> fire alarm system? (delete)								
2.		Are final exit routes as accessible to all, including wheelchair users, as are the entry routes?								
3.		Is evacuation from <b>upper</b> and <b>lower</b> levels possible using an <b>evacuation lift / platform lift</b> with a protected pover supply? (delete)								
4.		If people with disabilities cannot evacuate from the building independently are designated and signed refuges available?								
5.		If refuges are available are they equipped with 'carry chairs'?								
6.		Is there a 'management evacuation strategy' for staff, congregation and visitors, and are staff trained in evacuation procedures?								
7.		Is the evacuation strategy checked regularly for its effectiveness?								
8.		Are evacuation routes checked routinely and regularly for freedom from <b>combustible materials / obstacles / locked doors?</b> (delete)								
9.		Are all fire warning devices and detectors checked routinely and regularly?								



		ibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>S/</b> Page No.
'S'	Su	pplementary						ısior	
Dat Loc No.	atio				Dexterity	Visual	Auditory	Comprehension	
			X	🗙 Ambulant	X	X	X	X	
		✓ or X as applicable							note (+ reverse)
1.									,
			_	_	_	_	_	_	
			Ш	Ш	Ш		Ш		
2.	Ш								
						П			
3.	П			Ш	Ш	Ш	Ш		
э.	ш								
4.			_	_					
5.									
6.									
_	$\Box$		LJ	Ш	Ш	Ш	Ш		
7.	Ш								
				П		П		П	
8.	П								
٠.									
9.									
10.									
			_					_	
				$\Box$	$\square$	$\Box$		╽.	

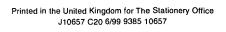


		ibility Audit Report: S AUDIT CHECKLIST						<b>C</b>	Sheet: <b>S/</b> Page No.
'S'	Su	pplementary						ISiol	.,,,
Dat Loc No.			🗙 Wheelchair	🗙 Ambulant	X Dexterity	🗙 Visual	🗙 Auditory	🗙 Comprehension	
		✓ or <b>X</b> as applicable							note (+ reverse)
1.									
2.									
3.									
_					Ш	Ш	Ш	Ш	
4.	Ш								
5.	Ш								
6.									
7.									
•									
8.									
o.	Ш								
_									
9.	Ш	**************************************							
10.									



		sibility Audit Report: S AUDIT CHECKLIST						_	Sheet: <b>S/</b> Page No.
'S'	Su	pplementary	Wheelchair					sior	
Date: Location No.				🗙 Ambulant	X Dexterity	🗙 Visual	X Auditory	🗙 Comprehension	
		✓ or X as applicable							note
		• •							(+ reverse)
1.									
2.									
			_	_		_	_	_	
	_		Ш	Ц	Ш	Ш	Ц	Ш	
3.	Ш								
				Ш	Ш	Ш	Ш	Ш	•••••
4.	Ш								
_	$\overline{}$	······································		Ц	П		Ш	Ш	• • • • • • • • • • • • • • • • • • • •
5.	النا								
				П		$\Box$	$\Box$		
_	$\Box$		Ш	Ц	Ш	Ш	Ш	Ш	•••••
6.	Ш								
								$\Box$	
7				Ш		ш			•••••
/.	ш								
				П	П	П	П	П	
Ω			_						
0.									
				П	П	П		П	
9.				_	_	_			
٠.									
10.							**		
-									









Published by The Stationery Office and available from:

## The Publications Centre

(mail, telephone and fax orders only) PO Box 276, London SW8 5DT Telephone orders/enquiries 0870 600 5522 Fax orders 0870 600 5533

### The Stationery Office Bookshops

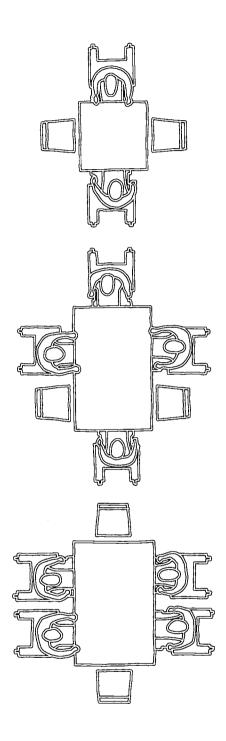
123 Kingsway, London WC2B 6PQ 0171 242 6393 Fax 0171 242 6394 68-69 Bull Street, Birmingham B4 6AD 0121 236 9696 Fax 0121 236 9699 33 Wine Street, Bristol BS1 2BQ 0117 9264306 Fax 0117 9294515 9-21 Princess Street, Manchester M60 8AS 0161 834 7201 Fax 0161 833 0634 16 Arthur Street, Belfast BT1 4GD 01232 238451 Fax 01232 235401 The Stationery Office Oriel Bookshop 18-19 High Street, Cardiff CF1 2BZ 01222 395548 Fax 01222 384347 71 Lothian Road, Edinburgh EH3 9AZ 0131 228 4181 Fax 0131 622 7017

The Stationery Office's Accredited Agents

(see Yellow Pages)



## **BUILDING BULLETIN 91**



This bulletin aims to assist governors and managers of schools, their architects and LEAs to achieve optimum accessibility of their school buildings. It recognises that how schools are designed, managed and operated all determine the successful outcome.

The process of Accessibility Audit is outlined and the purpose and structure of the report to which it gives rise. An appendix illustrates accessibility audit proformas for carrying out an audit survey, cross referenced to design guidance.

The design and management guidance in the Bulletin supplements the provisions of the DIZE 1997 Constructional Standards, and applies to new build construction and also extensions and returbishment. It is concerned with meeting not only Constructional Standards criteria but also building management issues which flow from the provision of accessibility.

"...practical solutions offered which will be of immense use to governing bodies and headteachers in carrying out their responsibilities. I have no heattation in recommending this building bulletin as a valuable resource."

John Adams

Chairman,

National Association of Covernors and Managers



£14.95







## **U.S. Department of Education**



Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

# **NOTICE**

## **REPRODUCTION BASIS**

